



County Borough of Wolverhampton

The
Health Services
of
Wolverhampton
in 1958

ANNUAL REPORT

by

J. F. GALLOWAY, M.D., Ch.B., M.R.C.S.

L.R.C.P., D.P.M., D.P.H.

Medical Officer of Health

and

Principal School Medical Officer

County Borough of Wolverhampton



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CONTENTS

Staff	4
Introduction	5
Section I.	Statistics and Social Conditions	
A.	Summary of Statistics	36
B.	General Statistics	39
C.	Natural and Social Conditions	43
Section II.	Health Services of the Area.	
A.	Hospital, Specialist and Allied Services	
1.	Hospitals	46
2.	Sanatoria	47
3.	Chest Clinic	47
4.	Venereal Diseases Clinic	47
5.	Nursing Homes	47
6.	Bacteriology	48
B.	Local Executive Council Services	
1.	General Medical Service	48
2.	Pharmaceutical Service	48
3.	Dental Service	48
4.	Ophthalmic Service	49
5.	General	49
C.	Local Authority Health Services	
1.	Care of Mothers and Children	49
2.	Midwifery	58
3.	Health Visiting	60
4.	Home Nursing	62
5.	Vaccination and Immunisation	63
6.	Ambulance Service	65
7.	Prevention of Illness, Care and After-care	66
8.	Domestic Help	69
9.	Health Education	70
10.	Mental Health	70
11.	Care of Aged and Infirm	76
12.	Epileptics	76
13.	Spastics	77
14.	Blind Persons	77
15.	Medical Examinations	78
Section III.	Infectious and Other Diseases.	
1.	Incidence	78
2.	Scarlet Fever	79
3.	Whooping Cough	79
4.	Poliomyelitis	79
5.	Measles	79
6.	Dysentery	79
7.	Pneumonia	80
8.	Paratyphoid	80
9.	Food Poisoning	80
10.	Puerperal Pyrexia	80
11.	Ophthalmia Neonatorum	80
12.	Miscellaneous	80
13.	Venereal Diseases	80
14.	Tuberculosis	81
15.	Cancer	82

CONTENTS—Continued

Report of the Chief Public Health Inspector (Mr. F. Binns Hartley).

Section IV. Sanitary Circumstances of the Area.

1. Water Supplies	86
2. Swimming Bath Water	86
3. Offensive Trades	86
4. Hairdressers' and Barbers' Premises	86
5. Pharmacy and Poisons Act, 1933	86
6. Sanitation	87
7. Infectious Diseases	87
8. Keeping of Animals	87
9. Disinfection and Disinfestation	87
10. Smoke Abatement	88
11. Atmospheric Pollution	90
12. Factories Acts, 1937 and 1948	91
13. Noise Nuisances	92
14. Rag Flock and other Filling Materials	93
15. Canal Boats	93
16. Rodent Control	93
17. Nuisances from Pigeons	95

Section V. Housing.

1. Slum Clearance	95
2. Common Lodging Houses	98
3. Overcrowding	98
4. Moveable Dwellings	98
5. Improvement Grants	98
6. Rent Act, 1957	98

Section VI. Inspection and Supervision of Food.

1. Meat Inspection	99
2. Slaughter of Animals Acts, 1933—1958	102
3. Food Premises	102
4. Inspection of Food Premises	103
5. Disposal of Condemned Food	103
6. Milk Supply	103
7. Ice Cream	104
8. Dairy Festival Exhibition	106
9. Sampling	106
10. Hen Egg Albumen	109
11. Contaminated Apples	109
12. Catering Establishments	109
13. Provision Shops, Warehouses and other Shop Shop Premises	110
14. Wet and Fried Fish Shops	110
15. Shell Fish	110
16. Mobile Fish and Chip Shop	110
17. Registration of Butchers' Shops and Premises where Preserved Food, etc., is prepared and manufactured	110
18. Licensed Premises	111
19. Bakehouses	111
20. Retail Markets	111
21. The Food and Drugs Act, 1955	111

PUBLIC HEALTH STAFF

at 31st December, 1958.

Medical Officer of Health	...	...	J. F. Galloway, M.D., Ch.B., M.R.C.S., L.R.C.P., D.P.M., D.P.H.
Deputy Medical Officer of Health	...	...	M. J. Raynor, M.B., Ch.B., D.P.H.
Maternity and Child Welfare. Senior Medical Officer	...		Abigail J. M. Lesslie, M.A., M.B., Ch.B., D.P.H. (died 5th March, 1959).
Assistant Medical Officers	...		Marjorie G. Bryan, M.B., B.S., M.R.C.S., L.R.C.P., D.R.C.O.G., C.P.H. Margaret Ingham, M.B., Ch.B., D.C.H.
Tuberculosis*	...	...	J. Aspin, M.A., M.D., Ch.B., D.M.R.D. J. D. P. David, B.Sc., M.D., B.Ch.
Analyst	...	...	F. G. D. Chalmers, M.A., B.Sc., F.I.C. (part time).
Health Visiting. Superintendent	...	...	Miss M. Cole, S.R.N., S.C.M., H.V. 13.
Health Visitors	...	...	2.
Nurses	...	...
Midwifery. Supervisor	...	...	Mrs. D. K. Rinkel, S.R.N., S.C.M., M.T.D.
District Midwives	...	...	20.
Premature Baby Nurse	...	...	1.
Home Nursing. Superintendent	...	...	Miss E. Hill, S.R.N., S.C.M.
Home Nurses	...	...	20 (Six part time).
Mental Health Service. Mental Deficiency Officer	...		Miss E. Bottomley.
Duly Authorised Officers	...		F. L. Bird. E. V. Oram, S.R.N., R.M.D.N.
Occupation Centre Supervisor			Miss H. Chettle.
Occupation Centre Assistants			5 and 2 general assistants.
Home Help Service. Organiser	...	...	Miss M. Saunders.
Home Helps	...	...	67 (55 part time).
Day Nurseries. Matrons	...	...	Miss C. Fitzgerald, S.R.N. Miss K. A. Murray, C.N.N.
Nursery Assistants	...	...	23.
Domestic Staff	...	...	11 (Six part time).
After-care Officer	...	...	Miss E. H. Poole, B.A., A.M.I.A.
Public Health Inspectors. Chief Public Health Inspector			F. Binns Hartley, M.A.P.H.I., M.R.S.H.
Specialist Inspectors	...	...	8.
District Inspectors	...	...	6 (Two part time).
Pupil Inspectors	...	...	3.
Clerical. Chief Clerk	...	...	J. Darby.
Clerks	...	...	23.
Clinic Clerks (part time)	...	...	10.
Other Staff. Rodent Operatives	...	...	2.
Miscellaneous	...	...	3.

***Jointly with Birmingham Regional Hospital Board.**

Health Department,
59, Waterloo Road,
Wolverhampton.
Tel.: Wolverhampton 24281.
June, 1959.

To the Mayor, Aldermen and Councillors of the
County Borough of Wolverhampton.

Mr. Mayor, Ladies and Gentlemen.

In presenting to you the Report on the health of Wolverhampton during 1958, I wish to draw your attention particularly to some of the matters to which it refers and, in addition, to comment on this local health authority's experience of the first ten years of the National Health Service which was introduced on the 5th July, 1948.

In 1958 births exceeded deaths by 768, yet the population declined by 2,100 to 147,800, so that 2,868 residents must have left Wolverhampton during the year. The population of Wolverhampton reached its maximum of 162,300 in 1952; in the six subsequent years it has fallen by 14,500 and in that time births have exceeded deaths by 3,950; these figures mean that in the six years 18,450 people or 11.4 per cent of the population have gone to live elsewhere. Most of them have migrated to areas adjacent to Wolverhampton because there was no room to accommodate them within the borough. The loss of these families, many with young children, is a factor in producing the accelerating decline in the average number of persons in each house; in 1921 it was 4.8, in 1931 it was 4.3, in 1951 it was 3.6 and in 1958 it was 3.2

The weather during the year was unusual; the month of March was exceptionally cold and dry with a period of eleven days when no rain was recorded; April was the driest month of the year; rain fell on 19 days in June, 19 in July, 14 in August and 19 in September, and these four holiday months had over 15 inches of rain representing approximately half the year's total; a dry spell was experienced in October. This weather appears to have had little effect on the population, for the new sickness claims with an average of 608 a week were substantially lower than those of the preceding year and the total number of deaths was also lower than in the preceding year.

No cases of diphtheria, smallpox, meningococcal infection or typhoid fever occurred, and there was only one case of poliomyelitis. Deaths from tuberculosis declined to a new low level and once again the death rate in Wolverhampton was the same as that for England and Wales, an experience unknown before 1956 but now occurring for the third successive year. Cancer of the lung continued to increase as a cause of death; in 1948 it caused 23 deaths in every 100,000 of the population, in 1953 it caused 29 deaths and now in 1958 it caused 46 deaths per 100,000 of the population; the relationship between heavy cigarette smoking and the majority of deaths from the condition is incontrovertible, and no amount of sophistry can make it otherwise. The unsatisfactory trend in the incidence of venereal diseases since 1953 was partially arrested; the number of new cases of gonorrhoea which in successive years increased from 62 in 1953 to 76, 84, 156 and 174 increased again to 255 in 1958, but the number of new cases of syphilis which in successive years increased from 22 in 1953 to 26, 43, 46 and 74 fell to 41 in 1958.

Clearance of the slums has continued and 522 houses were represented as unfit including 451 in the Cobden Lane and Franchise Street Clearance Areas; since 1946 when the programme of clearance was resumed 3,016 houses have been represented as unfit including 2,151 in clearance areas. In view of this satisfactory progress, the time has arrived for more attention to be devoted to the prevention of atmospheric pollution with its damaging effect on the health of the community.

The National Health Service began on the 5th July, 1948 and the Minister of Health has asked medical officers of health to include a brief general review of the manner in which, since that date, the local health services have functioned in the wider setting of the National Health Service generally. In Wolverhampton the first decade of the National Health Service have been years of absorbing interest for the staff of the Health Department. No effort has been spared in endeavouring to overcome the disadvantage of the Service's tri-partite structure. Action that would help patients has been regarded as an essential duty. Assistance has been given to the hospitals and practitioners as an article of faith,

while assistance received from them has been regarded as an act of grace. Endeavours have been made to exorcize pride in illusory professional prestige. This severe discipline has kept avoidable friction to a minimum.

Immunisation and vaccination play an essential part in the the control of infectious diseases and local health services perform the major part of this work.

Smallpox came into prominence in England in the reign of Elizabeth I and as recently as 1870 an epidemic caused 44,000 deaths in three years. The last recorded case in Wolverhampton was in 1928 although a local epidemic occurred in surrounding areas in 1947. The disease became controllable in 1796 when Jenner proved that inoculation with material from a person suffering from cowpox protected against smallpox and in 1853 vaccination became obligatory for all infants although there were no provisions for its enforcement. The number of primary vaccinations against smallpox in Wolverhampton in 1948 represented no more than 15 per cent of the live births. The National Health Service made it voluntary on the assumption that better results were likely in this country from persuasion than from threats ; this has proved true, and in 1958 the number of children under one year of age vaccinated represented 40 per cent of the births and over half of these vaccinations were carried out by the local authority's medical officers. The need for protection against smallpox is greater than ever today when aerial travel brings reservoirs of infection within a few hours of this country.

Diphtheria became a menace to the children of this country after its re-appearance in epidemic form in Cornwall in 1855. In Wolverhampton it was responsible for as many as 2,362 cases and 480 deaths in the years 1895 to 1898 and in more recent times 360 cases occurred within a space of two years in 1936 and 1937 with 39 deaths, and a further 321 cases occurred in 1940 and 1941 with 44 deaths. An effective method of protection was introduced in the late 1920's and the first diphtheria immunisation clinic in Wolverhampton was established by the Health Department in

1929 when 21 persons (13 children and 8 adults) were immunised, followed by 150 the next year. For several years progress was slow in the face of apathy and some opposition and the number of young children protected each year was about 500. A great step forward was made in April 1935 when with the goodwill of the teachers and the co-operation of the Education Committee immunisation of the children in the Junior and Infant Departments began and the number of children protected each year rose to about 2,500. War conditions enhanced the risk of the disease spreading, and special efforts were made which increased the number immunised to over 2,800 a year; during these years general practitioners began to immunise some of their young patients and they formed about 5 per cent of all children immunised.

With the introduction of the National Health Service in 1948 every child had its own general practitioner from whom, if the parent so desired, immunisation could be obtained free. The number of children immunised in the ten years from 1948 to 1958 was 25,000 of whom 8,000 were done by general practitioners. This yearly average of 2,500 children immunised (one third by their own doctors), compares favourably with earlier years for it is associated with a lower birth rate and a population that is declining due to rehousing outside the borough. In the five years 1949 to 1953 there were 39 cases of diphtheria notified and one died; in the five years 1954 to 1958 no case occurred.

Whooping cough, recognised since Tudor times, has remained a serious threat to young children particularly in the first year of life, but has become less dangerous since the introduction of an effective vaccine which was made available routinely at all welfare centres in 1954; in 1958 the 1,090 children receiving it either at the clinic or from private practitioners represented 45 per cent of the children born during the year; over 60 per cent of those receiving it did so at the welfare centres. In the five years 1949 to 1953 there were 3,106 cases of whooping cough notified and five died; in the five years 1954 to 1958 there were 1,532 cases notified and three died, none of whom had received the vaccine.

Tuberculosis killed people in Wolverhampton at rates of 232 a year per 100,000 of the population in the 1880's, 141 in the years from 1911 to 1920 and 60 in the 1940's. It killed mainly in the form of pulmonary tuberculosis, an infection which when first acquired results in an extremely mild illness or no illness at all, and the tuberculin reaction becomes positive; in certain cases, however, and particularly in children under five and young adults over 15 years of age, it may go on to acute progressive illness with a risk of general infection; even if the primary infection is safely overcome, no absolute immunity results and the resistance of the patient may subsequently break down. An epidemic of pulmonary tuberculosis which began with the industrialisation of our country, reached its zenith almost a hundred years ago and is now declining; this decline is due firstly to improved environmental conditions, including adequate nutrition, improved housing, diminishing occupational hazards and greater social security; secondly to improved treatment; and thirdly to heightened herd immunity resulting from constant infection coupled with the elimination of the most susceptible. Consequently, tuberculosis will be reduced to insignificance and kept there in the absence of any unforeseen factor by unremitting efforts to improve economic, social and industrial conditions, by therapeutic measures being made available ever earlier by efficient contact tracing and the mass radiography of susceptible groups so that active cases can be rapidly isolated and made sputum-negative, and by raising the herd immunity through any safe measures known to be effective.

Protection against tuberculosis by using a vaccine, B.C.G. (Bacille Calmet Guerin), was introduced in Wolverhampton on a small scale in 1951 by the Pædiatric Department of the local hospital and by the chest physicians. It raises the immunity to tuberculosis for a few years, and though it is not a panacea it can usefully be integrated with our existing methods of limiting tuberculosis and it is most likely to benefit contacts and groups about to experience special risks of infection. Local health authorities, in their search for hitherto undetected cases of tuberculosis by means of X-raying expectant mothers and by skin testing infants and school entrants, are able to assist in identifying contacts who may benefit from B.C.G. vaccination. The Health Department

began offering it to suitable school leavers in 1955 and last year 1,498 children received it, and in addition 382 received it from the hospital service as well as a small number from the chest physicians. In vaccinating senior school children we are able to reduce, at least temporarily, their susceptibility to infection.

In the five years from 1948 to 1952 the average number of new cases of tuberculosis ascertained each year was 168, comprising 152 cases of pulmonary tuberculosis (93 males and 59 females) and 16 cases of non-pulmonary tuberculosis (8 males and 8 females); associated with these notifications was an average of 79 deaths a year. In the five years from 1953 to 1957 the average number of new cases ascertained each year was 172 comprising 155 cases of pulmonary tuberculosis (92 males and 63 females) and 17 cases of non-pulmonary tuberculosis (8 males and 9 females); these 172 notifications were associated with an average of 31 deaths a year. It will be seen that while the number of ascertained cases remained constant the number of deaths was drastically reduced. This disparity is attributable to the ascertainment of cases at a much earlier stage of the disease and also to the greater efficiency of modern methods of treatment. During the last two years there has been an indication that the number of new cases ascertained is showing a substantial downward trend, which probably is attributable in varying degrees to the reservoir of infection in the community diminishing and the capacity to resist infection rising.

The 1958 figures of 141 notifications and 15 deaths afford hope that a favourable environment, heightened herd immunity resulting in part from B.C.G., early diagnosis and modern treatment will reduce tuberculosis in a few years to a comparatively rare condition; but whatever therapeutic advances lie ahead and whatever means are found to raise the specific resistance of the patients to infection, our control of tuberculosis will continue to depend largely on controlling the environment.

Poliomyelitis, the one infectious disease that has become more widespread and severe with rising standards of living, was recognised as a distinct disease at the beginning of the nineteenth

century but was not considered to be infectious until an epidemic occurred in Sweden in 1887. Since then epidemics of "polio" have spread across the world, chiefly affecting countries with advanced standards of hygiene like North America, Australia and New Zealand. In the earlier epidemics children under five were the outstanding victims, hence the name "infantile paralysis," but a significant feature of the recent outbreaks has been the large number of adolescents and young adults attacked. Unfortunately these older persons are more prone to the serious respiratory form which produces most of the deaths. There were 84 cases of paralytic poliomyelitis in Wolverhampton during the ten year period 1949 to 1958; in seven cases they resulted in death. The highest number in any single year was in 1950 when, in a small epidemic, there were 36 cases and 3 deaths. Over half of the 84 cases occurred in children under ten years and the remainder were divided about equally between the 10 to 24 and the 25 to 39 age groups. There were only two cases over the age of 40.

The poliomyelitis virus was first isolated in 1909, but it was 1953 before Salk in the U.S.A. was able to produce a suitable vaccine for general use. Investigations are still in progress to determine the exact manner by which the disease spreads but so far it is clear that the virus is often present in human excreta, but that only in exceptional circumstances does an infected person develop paralysis. Vaccination against poliomyelitis was introduced in Wolverhampton in 1956 for children aged under 10 years and 349 were vaccinated; this number increased to 2,893 in 1957 and in 1958 it became available for all children under 15 years and 11,560 received it. Today at least half of the Wolverhampton children under 16 years have had two injections and are protected against poliomyelitis, but the figures cannot be estimated accurately as the general practitioners' records are not yet available.

Five of the seven deaths which have occurred in the last ten years and all three deaths in the last three years have been of patients aged 25 to 39 years and it would seem logical, in the light of this experience, to extend vaccination to this age group when the vaccine is more readily available.

Mothers and children are sections of the population peculiarly susceptible to adverse conditions and they have received preference in measures to protect the health of the community.

The Midwives Act, 1902, an Act to secure the better training of midwives and to regulate their practice, was the first step towards the provision of the wide field of personal health services which exist today. It came into operation on April 1st, 1903 and gave women claiming to be midwives two years in which to be so certified, and after that period it prohibited the attendance of a non-certified person on a woman in childbirth except under the direction and personal supervision of a medical practitioner. It set up the Central Midwives Board and made every county and county borough in England and Wales the local supervising authority for the midwives within its area. In the absence of an officer to carry out the supervision, the Act was almost a dead letter in Wolverhampton until October 1907 when Miss M. Carter began work as Inspector of Midwives, a post she kept until her retirement in 1936, although subsequently she was known by the less aggressive title of Supervisor of Midwives. In 1908 she had 39 certified midwives to supervise and resulting from her efforts one midwife had her name removed from the Roll for being incompetent, two received official warnings for breaches of the rules, proceedings were taken successfully against three uncertified women for contravention of the Midwives Act, and four inquests following maternal deaths were held, in two the midwives being exonerated from all blame and in the other two being censured for neglect.

The duties of the Supervisor of Midwives included giving advice to mothers and this work was increased by the adoption by the Council in 1908 of the Notification of Births Act, 1907 which enabled visits to the mother and her infant to be made without delay; the importance of the care of infants was obvious for in the years 1891 to 1900 they failed to survive the first year of life at the rate of 195 per 1,000 born, and in the years 1901 to 1910 at the rate of 138 per 1,000 born; a special nurse called the health visitor was appointed at the close of 1911 and she was succeeded in June 1914 by Miss D. Tonks who served the Health Department

until her retirement 38 years later from the post of superintendent health visitor. The work continued to grow and in April 1915, two Infant Welfare Centres were opened under Dr. Elizabeth McLaren, one in St. James' Schools behind the church in Horseley Fields, and the other in St. Paul's School, Merridale Street. In March 1917 a third centre was opened in Lower Stafford Street, and in 1918 No. 4, Salop Street was leased where also a room was fitted up as an ante-natal clinic. In 1920 there were 1,088 new cases and with a staff of three health visitors the 7,233 attendances were described as "overwhelming": the health visitors paid 8,147 visits to mothers and children in their homes.

The Maternity and Child Welfare Act, 1918, an Act to make further provision for the health of mothers and young children, with its accompanying circular and regulations stressed the supreme importance of maternity and child welfare work at that time, and the Local Government Board made grants available for a variety of purposes, including ante-natal care, child welfare centres, day nurseries and home helps. These measures were the foundations upon which the local health authority's services were developed in the inter-war years.

The child welfare centres did good work and special premises were erected in Ward Street in 1926, Lea Road in 1928 and in Park Lane in 1931, this last replacing a child welfare centre held in the old Council Offices, Heath Town. Their value was limited by the poor attendances of children after the age of two, and the Ministry of Health and Board of Education realised that it was uneconomic to allow the health and stamina of infants to deteriorate till five years old and then to spend large sums of money in trying to cure them between five and fifteen. The gap between the infant welfare centre and the school medical inspection needed to be filled up. This was met by more home visiting which called for a larger staff and by mid-1948 the establishment had increased to a superintendent and 16 health visitors although only 11 were employed; the field of work had widened greatly and immunisation against diphtheria was only one activity which had materially increased the work; 18,000 attendances were made by infants and young children at the centres, and 22,000 visits were made to the homes.

The work has grown substantially since the introduction of the National Health Service. In addition to instructing and advising mothers at the ante-natal and infant welfare sessions the duties of health visitors include visiting patients discharged from hospital and in need of after-care, visiting elderly people who may require domestic or other assistance in the home, stressing to parents the importance of vaccination and immunisation, co-operating with hospitals and general practitioners by furnishing relevant details of home conditions and ensuring that advice and treatment are carried out and, in recent years, considerable time has been devoted to visits connected with the Medical Research Council's investigation into the efficiency of inoculating school leavers against tuberculosis. Two of the health visitors have been attached to the Chest Clinic for whole time work, and one accompanies the pædiatrician when he visits his wards. In 1958, attendances at welfare centres exceeded 20,000 and 30,000 visits were made to homes by the Superintendent and her staff of 15 ; these visits took them into 49% of all households in the borough. In 1958 infants failed to survive the first year of life at the rate of 25 per 1,000 born.

Much of the increased work among mothers and children has been carried out in inadequate rented buildings. The opening of conveniently designed new premises in Renton Road, Oxley in December 1958 by Sir John Charles, Chief Medical Officer of the Ministry of Health, has been appreciated by both the mothers and the staff. The building should prove valuable in helping the local authority to meet its increasing responsibilities in the National Health Service ; the provision of similar premises in several other parts of the town is required urgently and plans already are being prepared to meet the need.

The shortage of health visitors is an impediment and an unequivocal declaration by the Minister of Health that he shares the well-informed opinion of medical officers of health that the training and experience of the health visitor makes her an irreplaceable member of the team would be valuable at a time when practical knowledge of the task in hand is derided by a vocal and apparently influential minority.

Although two infant welfare centres had been opened in 1915 there was no ante-natal clinic. The services of a doctor were beyond the means of most women and the booking of a midwife was often informal and consisted of a passing remark on the part of the patient that she would require the services of a midwife in a few months' time. About five in every thousand confinements proved fatal to the mother, few doctors or midwives practised ante-natal work, and a suggestion that there should be notification of pregnancy was regarded as an intrusion into the private life of the family. After the Maternity and Child Welfare Act, 1918, plans were made for starting ante-natal work and the first clinic in Wolverhampton was opened in 1919 to which midwives were encouraged to send their patients, and a School for Mothers was started in 1920 where talks were given, questions answered, practical help provided in the preparation for the coming confinement and encouragement given to seek early advice if there were any untoward symptoms. These clinics marked the beginning of a long and successful history.

The majority of general practitioners rarely practised midwifery, but the Midwives Act of 1918 increased their contact with the work for it directed midwives to call in medical aid in emergencies and required the local supervising authority to pay the doctor's fee and mileage. The Midwives Act of 1936 which introduced the municipal midwifery service enabled the local health authority to require to a much greater extent than before that midwives should secure adequate ante-natal care for their patients. Large numbers of pregnant women sought care at the local authority's ante-natal clinics because there was no organised provision for the services of general practitioners to be freely available to mothers and children, and patients rarely saw a general practitioner unless he was called upon in an emergency by the midwife. In 1946 and 1947 new cases attending the ante-natal clinics represented 51 per cent of all pregnant women normally resident in Wolverhampton.

The introduction of the National Health Service in July, 1948 caused confusion for every patient was now on a doctor's list although this did not entitle her to have his services for her pregnancy and confinement unless she specially asked him to undertake

the responsibility which, if he accepted, entitled him to a special fee. Doctors discouraged patients from attending the ante-natal clinic which they regarded as a competitor, midwives did not know whether a patient was receiving care from the practitioner on whose list she was, the practitioners met substantial difficulties in organising the time-consuming care which ante-natal supervision requires and the new service despite its cost brought only frustration to the ante-natal system and more inadequate care for the patient. In the years 1949 and 1950 the new cases attending the ante-natal clinics represented only 35 per cent of all pregnant women normally resident in Wolverhampton.

Fortunately it was possible to face the difficulties in a constructive way, for the Chairman of the Health Committee was a general practitioner who had the confidence of his medical colleagues and the senior medical officer in charge of maternity and child welfare was very experienced in midwifery and they realised that certain facts had to be accepted. The first is that every patient having a domiciliary confinement should have a doctor under contract to attend her whenever his services are required and that a municipal midwife must insist on every patient that she books also booking a doctor. The second is that in 90 per cent of cases the doctor is not present at the time of delivery and accordingly even although a doctor is booked in all cases, the midwife still is acting as a midwife and not as a maternity nurse in 90 per cent of cases; usually she has no foreknowledge of which cases a doctor will attend, and accordingly she must provide ante-natal care for all her patients. The third is that the midwife is an employee of the local authority which can require the midwife to book her cases and to provide them with ante-natal care at the local authority's own clinic premises which are more suitable for the purpose than her own home.

From this commonsense and inescapable basis a more elaborate arrangement was established which, briefly, requires the midwife to send to her general practitioner every patient who comes to book her, and requires the general practitioner to send to the midwife every patient who comes to book him. By agreement most of the ante-natal care is given in the local authority clinic and the local

authority's medical staff carry out most of the investigations required during pregnancy, although the general practitioner sees his patient immediately any abnormality is detected. The arrangement, which satisfies the practitioners, has resulted in marked activity at the clinics. In 1951, the first year in which the scheme operated, 63 per cent of all pregnant women normally resident in Wolverhampton attended the clinics compared with 35 per cent in the previous two years and this proportion has steadily risen until it is more than 80 per cent in the years 1957 and 1958. As only half the pregnant women ultimately are confined at home by municipal midwives it will be realised that in addition more than half the women who ultimately are confined in hospital or in a private nursing home also are sent to the clinic for ante-natal supervision. The maternal mortality rate for the five years 1954 to 1958 was 0.7 per thousand total births.

Expectant and nursing mothers requiring dental treatment prior to the 5th July, 1948 were referred to the out-patient dental department established at the Women's Hospital in November 1924 and financed jointly by the Corporation and the hospital authorities. The bulk of the work consisted of extractions and the dental surgeons who provided dentures were paid by the Corporation and the mothers were assessed to reimburse the money according to their means. On the introduction of the National Health Service the local authority sought to replace this arrangement which provided about 50 patients with dentures each year, by an expansion of the school dental service and by the employment of private dental practitioners on a case or sessional basis. The local dentists were too busy with their own patients to be able to accept work from the local authority, and the school dental service suffered a serious diminution in its staff due to the much higher rewards in private practice. As a temporary measure the arrangements in force before the appointed day were continued although the school dental service treated children under five referred from welfare centres. There was a gradual decline in the number of mothers receiving dental treatment at the Women's Hospital and in 1952 only 6 patients completed treatment and were supplied with dentures; at the same time an increasing number of children under 5 were treated by the school dentists. In June, 1953 the

arrangements for all forms of dental treatment (including dentures when necessary) to be provided by the authority's own dental surgeons were put into operation on a limited scale. In 1955 the school dental service opened its own laboratory and appointed the first technician ; in 1956 evening sessions were first worked which many patients find more convenient to attend. In the years from 1954 to 1958 an annual average of 340 mothers have been treated of whom 190 were provided with dentures ; in addition, over 600 children under five are treated each year. The service is prevented from growing only by the shortage of dental surgeons.

The municipal midwifery service authorised by the Midwives Act, 1936 was established on the 1st of July 1937 at a time when approximately 1,670 women were confined in their own homes each year in Wolverhampton and 1,500 of these were delivered with no other doctor engaged. The 18 midwives appointed by the Corporation included 9 already in private practice in the borough. Among those engaged, 13 were state registered nurses in addition to holding a certificate of the Central Midwives Board.

Immediately before the introduction of the National Health Service in 1948, the maternity provision in Wolverhampton comprised the municipal midwifery service which was short of staff whose numbers at times fell as low as 14, about 12 domiciliary midwives in private practice who were under-employed, a municipal maternity home of 15 beds, a number of private maternity homes including the Queen Victoria Nursing Institution, and accommodation at the Women's Hospital and at New Cross Hospital.

As a hospital centre with a large population looking to it for services, there has always been an influx of patients to Wolverhampton for institutional accommodation and from 1945 to 1947 about 15 per cent of all confinements (domiciliary and institutional) were of non-residents. In the years 1950 to 1952 the proportion was 27 per cent and in 1956 to 1958 it was 37 per cent. Facilities in Wolverhampton obviously have become more readily available to non-residents since the introduction of the National Health Service.

As far as people normally resident in Wolverhampton are concerned, prior to the introduction of the National Health Service their requirements for maternity services were met in 45 per cent of cases by the local authority's municipal midwives, in 10 per cent by private midwives and in 45 per cent by hospitals or nursing homes. The National Health Service with its free facilities dealt a severe blow to private domiciliary midwives, four fifths of whose work disappeared immediately and the remaining one fifth disappeared gradually but almost completely within the next five years.

At first private maternity homes were able to meet the heavy demand for accommodation, but later they found themselves increasingly unable to compete with the salaries and conditions of service of the National Health Service. With one exception they had all closed five years later when the maternity requirements of Wolverhampton residents were met in 51 per cent of cases by municipal midwives, in 1 per cent by private domiciliary midwives, in 8 per cent by private nursing homes and in 40 per cent by health service hospitals and nursing homes. Today the distribution is 54 per cent by municipal midwives, 3 per cent by private nursing homes and 43 per cent by health service hospitals and nursing home.

Although the proportion of confinements attended by municipal midwives has remained almost constant, the number has declined, due to the falling population and the lower birth rate, from 1,595 cases in 1949 to 1,321 cases in 1958. However the work done by the service has not declined because in addition to their own work they have been called upon to attend an increasing number of patients confined in hospital and discharged prematurely. This first began on a substantial scale in 1950 and by 1953 as many as 461 cases were discharged to the care of the municipal midwifery service and each patient received an average of a little more than two visits. The number has increased until in 1958 it reached the large figure of 856 and the patients had left hospital sooner after confinement so that each patient discharged received an average of approximately six visits. For every three patients they nursed after delivery at home, the municipal midwives were called upon to nurse two who had been delivered in hospital.

The Municipal Midwifery Service introduced analgesia by inhalation in September, 1948 when the first gas and air sets were used. In 1949 the municipal midwives used it in 9 per cent of their cases, increasing to 71 per cent in 1954. Trilene which had been used by general practitioners in a small proportion of cases became available to municipal midwives in 1955 and since then has largely replaced gas and air as an inhaled analgesic. In 1958, over 84 per cent of patients had either trilene or gas and air, the former being used twenty times oftener than the latter. Since pethidine by injection became available for use by midwives in 1951, the municipal midwives administered it to the majority of their patients.

There is a shortage of practising midwives throughout the country, and as the understaffed maternity hospitals are tempted to discharge patients too soon after childbirth, the already over-worked domiciliary midwives have to nurse these additional patients whom they have not even delivered. Because their work leaves them no leisure to proclaim their inadequate pay and precarious off-duty time they move quietly and usually regretfully to other work.

Premature babies form between 7 and 8 per cent of all live births in Wolverhampton and a special nurse has been available since July 1946 to visit them. She is notified of all infants weighing $5\frac{1}{2}$ pounds or less at birth and she begins her care of the baby usually the day after birth when the child is at home or as soon as the child returns home when the birth has been in hospital; special cots and equipment are lent from the Health Department. During the past five years the nurse has usually paid about 1,000 visits to 180 premature infants each year and she works in close co-operation with both the general practitioners and the pædiatrician.

Day nurseries where children under five years of age can stay all day and receive breakfast, dinner and tea have long existed in the textile areas of Lancashire and Yorkshire but were introduced to Wolverhampton only during the war when unprecedented

demands for female labour led to the opening of the so-called "war-time day nurseries." Three were opened in 1942. One was in "The Woodlands," a large detached house which the Corporation finally acquired in 1947 and which underwent alterations and extensions which were completed in 1949. The two other day nurseries, one in Marston Road and one adjoining Elston Hall School were in standard hutments. When the Ministry of Health transferred war-time day nurseries to the local authorities on the 1st April, 1946, the building at Elston Hall School was closed as a day nursery. The following year the nursery at Marston Road was closed as the owner required the site and it was replaced by a new building in Birmingham Road.

The average number of children in attendance daily at the war-time day nurseries rose to 123 for the year 1945 and then gradually declined to 92 in 1949 and 75 early in 1952. The local health authority closed Birmingham Road Day Nursery for five months from June 1952, and this led to a further fall in attendances which in 1953 were as low as 57. Subsequently there has been a slow increase in the number of children in attendance daily and in 1958 it reached a total of 80, of whom 48 were at "The Woodlands" and 32 at Birmingham Road.

For three years beginning in 1950, attendances at day nurseries were restricted rigorously to priority groups consisting of the children of widows, widowers, unmarried mothers and separated or divorced parents, children from families in which the mother is ill, the father unemployed, incapacitated or in the Forces, and children with a parent in prison. Subsequently, non-priority cases were admitted with the consent of the Health Committee at charges differing from those for children in the priority groups for whom a flat rate is charged amounting at present to 2s. 0d. a day.

Home Nursing was undertaken by three voluntary organisations before the "appointed day." The Royal Hospital maintained a hostel for nurses at Nos. 3 and 5, Bath Road, and employed five full-time trained nurses; the Bushbury, Low Hill and District Nursing Association employed two whole time trained nurses who worked from their homes in Low Hill and in Bushbury; the

Heath Town District Nursing Association employed one trained nurse. The staffs of these organisations were transferred to the Health Department when the National Health Service was introduced.

The whole time Supervisor of District Nurses was appointed and took up her duties on the 1st November, 1948. Difficulties were experienced in recruiting state registered nurses and in 1949 state enrolled assistant nurses were first appointed. In 1950 one of the houses in Bath Road was converted to other use because of the paucity of nurses willing to live in, and in 1955 when the Home Nursing Service was transferred from No. 3, Bath Road to accommodation in the extended Health Department all nurses became non-resident.

In the past decade the work of the service has almost doubled ; in 1949 a staff of nine paid 23,000 visits to 965 patients ; in 1953 a staff of fourteen paid 32,000 visits to 1,427 patients ; in 1958 a staff of nineteen paid 42,000 visits to 1,621 patients.

In the first half of the decade cases of tuberculosis accounted for most of the increased work due to the widespread introduction of domiciliary treatment by injection, but latterly there has been an increasing demand for the nursing of both medical and surgical cases, with a diminishing number of visits to cases of tuberculosis. In 1949 medical cases required 76 per cent of all the visits, surgical cases 17 per cent and tuberculosis 2 per cent with the remainder not falling into any of these groups ; in 1955 tuberculosis visits reached their maximum, 30 per cent of all visits. In 1958 medical cases required 74 per cent of all visits, surgical cases 17 per cent and tuberculosis 7 per cent. In addition to a six-fold increase in the number of visits to tuberculous cases since 1949, in the same period visits to medical cases have increased by 77 per cent and visits to surgical cases by 83 per cent.

Although complete figures are available for only a much shorter period they still show significant changes in the ages of the patient visited and the number of visits paid in each age group. In 1953 children under the age of 5 constituted 8 per cent of all patients treated, those aged 5 and under 65 constituted 48 per cent

and those aged 65 and over 44 per cent, while in 1958 the young children constituted 4 per cent, those aged 5 to 64 constituted 41 per cent, and those aged 65 and over constituted 65 per cent showing decreases in both groups under 65 and a substantial increase of those over 65 by one quarter. When the number of visits to each age group is compared the change is more marked; visits to children under the age of 5 constituted 1 per cent of all visits in 1954 and fell 0.7 per cent in 1958; visits to those aged 5 and under 65 fell from 60 per cent of all visits in 1954 to 36 per cent of all visits in 1958, while visits to those aged 65 or over increased from 39 per cent of all visits in 1954 to 63 per cent of all visits in 1958.

There might be several explanations of these figures, but those concerned with the service are satisfied that the increase in the amount of surgical work is due largely to the earlier discharge from hospital of patients who have undergone surgical procedures and who continue to require nursing attention after their discharge from hospital. The increase in both the proportion of people visited who are old and the even greater increase in the proportion of all visits paid to them is due to the increasing number of old people in the population coupled with the tendency to undertake more extensive nursing procedures in the home in view of the inability of the hospital service to meet the demands of the chronic sick, who in the main are elderly people. Both these aspects of the work of the home nursing service contribute to the relief of the pressure on the hospital service; inevitably they will require a larger staff of home nurses.

A Home Help service was established in Wolverhampton in 1921, following the passing of the Maternity and Child Welfare Act, 1918, and consisted of four full time home helps employed to attend confinements for not more than two weeks, and who were available to help other types of cases when not attending confinements. The use made of the service increased steadily until 1926 when 140 cases were attended, but after that year the amount of work it performed declined steadily possibly due to the increased charges made for it. In the years immediately preceding the war it was little used and this continued until the introduction of the National Health Service Act in 1948.

A Supervisor was appointed and took up her duties on the 1st October, 1948, a year in which the service attended 52 cases comprising 42 maternity cases, 8 cases of acute illness and 2 cases of chronic illness. In 1949 the service began to grow and during the year approximately 200 cases were attended and of these 25 per cent were chronic, 30 per cent acute and 45 per cent maternity. Five years later the service was dealing with over 500 cases a year and these comprised 55 per cent chronic, 30 per cent acute and 15 per cent maternity. The service is now dealing with over 750 cases a year comprising 60 per cent chronic cases, 25 per cent acute and 15 per cent maternity. The significant trend is the increasing proportion of cases which are chronic and the rapidly increasing total number of cases dealt with.

In many of these cases the home help service is assisting a patient who also is receiving help from the home nursing service, and the combination of these two services maintains the patient in his own home when in their absence institutional treatment would prove essential. Like the home nursing service, a large staff of home helps will be required inevitably.

A recent development has been the use of selected home helps to support problem families by giving assistance which also is an example. Threats, cajolment, exhortation and pleading have limited value and the help of a sympathetic and efficient person in the house is likely to be as valuable a method of dealing with these problems as any other.

Our attitude to mental illness has undergone a transformation in the last half century accelerated since 1930 by the admission to hospital of voluntary patients. In surveying the work of the last ten years continuing change in the way patients are dealt with is evident.

In 1949 there were 106 admissions for treatment to mental hospitals and of these 42 per cent were voluntary patients; in 1958 there were 241 admissions and of these 88 per cent were voluntary patients. This great increase in the number of admis-

sions has not been accompanied by a correspondingly great increase in the number of patients in hospital for in ten years this has increased only from a little over 400 to 475. The smallness of this increase is attributable to the increase in the number of patients discharged, which has kept pace with the admissions ; in 1952, the first year in which a record of discharges was kept, 68 patients left hospital and 94 were admitted while in 1958, 220 patients left hospital and 241 were admitted.

These figures are indicative of the greater informality now associated with the treatment of mental illness. Many more patients spontaneously seek help and are provided with treatment at their own request resulting in a greatly increased turnover of patients with only a small increase in the number of them undergoing hospital treatment at any one time. The extent to which this informality has grown is vividly demonstrated in the number of patients who are referred to the Health Department for advice by their doctors or who come on their own initiative ; for in 1948 when the service was transferred to the Department such a procedure was almost unknown, but now between 500 and 600 persons reach it each year seeking help and advice. Mental health officers always are willing to give help ; they accompany patients to consultations with specialists, and they visit the mental hospitals to see patients, to inform the hospital staff of patients' histories, to hear of the patients' progress and to arrange for their return home.

The trend towards informality is to be encouraged. The immediate need is to provide more comprehensive arrangements for the after-care of patients ; their illness largely is due to their inability to adjust themselves to their surroundings, and both admission to hospital and subsequent discharge from it impose additional strains on their inadequate powers of adaptability ; it is important that they should have help and encouragement when accustoming themselves again to the hazards of everyday life.

It has long been recognised that there is a difference between people whose minds had previously functioned normally but had become disordered and people whose minds have never fully developed or (if they are children) seem unlikely to do so ; the latter group of patients became known as "mentally defective."

Although the first Mental Deficiency Act became law in 1913 it was 1917 before the Wolverhampton Voluntary Mental Welfare Association began ascertaining the defectives in the community. In 1932 the Health Committee undertook the administrative work and the Secretary of the Voluntary Committee was transferred to the staff of the Health Department with the title of "Mental Deficiency Officer"; and as the supervision of cases under guardianship, under statutory supervision and in institutions or on licence from institutions could not be delegated to untrained voluntary workers, these duties were transferred to the health authority in 1934.

Ascertainment is most complete in school children and school leavers; in the ten years from 1949 to 1958 a total of 374 defectives have been ascertained and of these 310 consisted of children under school age, of school age, and special school leavers. The proportion of ascertained defectives in the population inevitably will increase until few defectives remain alive who had left school before 1917 when ascertainment first began; by 1949 the total reached 602 or 3.8 per thousand of the population and by 1958 the total ascertained had risen to 720 or 4.9 per thousand of the population. In the same period there has been a substantial change in the method of dealing with defectives; in 1949 the proportion in hospital was 37 per cent and 8 per cent were under guardianship, 40 per cent were under statutory supervision and 15 per cent were under voluntary supervision, while in 1958 the proportion in hospitals was 29 per cent, 2 per cent were under guardianship, 45 per cent were under statutory supervision, and 24 per cent were under voluntary supervision. It will be seen that although there has been more thorough ascertainment during the last few years, this has been associated with a decline in the proportion in hospitals or under guardianship and an increase in the proportion kept under supervision, particularly voluntary supervision.

The occupation centre for young children was started by the Voluntary Committee in 1927 and was held in St. Paul's Church Hall; in 1934 it was agreed that this work should be undertaken by the local authority; the Church Hall was taken over for war purposes in 1939 and the occupation centre closed; in

1942 it was re-opened in Compton Road, then in turn transferred to Rosedale, Dunstall Park, to the basement of the Housing Department, to St. Patrick's Hall, then back to the basement of the Housing Department, and finally to the newly built occupation centre on its present site in 1947. Here it opened with 45 defectives on the register and this number has risen steadily year by year until it reached 98 in 1958. As many of those admitted as young children never become suitable for employment, they tend to remain in the centre which year by year has an increasing proportion of adults attending it.

The new Mental Health Bill is designed to meet the view now generally held that care for mentally disordered patients should be provided with the minimum of legal formality or restriction of liberty and that safeguards must be taken when it is necessary to override the patient's unwillingness or that of his relatives ; in putting these principles into practice much of the work undertaken by hospitals is being transferred to local health authorities. The new legislation rightly has been received with approval, but its limitations should be recognised. It cannot by law make the treatment of a patient whose profound depression invites suicide or whose existence is controlled by imaginary voices comparable in any way with a patient who has stomach ulcers or bronchitis. By taking every step possible to provide treatment without admission to mental hospitals, it will create the impression that there is something evil about these hospitals and once again surround them with an aura of hopelessness which the work of the psychiatric service has done so much to dispel in the last thirty years. The emphasis on administrative procedures at the expense of medical realities is significant and possibly it is not unassociated with the circumstances that made it possible for discussions on the Bill to take place between representatives of local authority associations and their medical advisers on the one hand and representatives of the Ministry of Health on the other, who appeared not to include a single medical representative.

The immediate requirements in Wolverhampton resulting from the new legislation, which is a landmark in the health service responsibilities of local authorities, is the provision of additional occupation centre accommodation and an increase in the staff of mental welfare officers.

Prevention of illness, care and after-care were included among the duties imposed on local health authorities in 1948, and they were required to prepare schemes providing for their performance. The precise meaning of the words may have been known to the architects of the National Health Service, but it was never revealed clearly to the authorities required to undertake the duties. Most activities of health authorities are directed to the prevention of illness, particularly those which also are sanitary authorities, and to the care of the sick including the mentally ill. Their special activities under this heading presumably are those devoted particularly to after-care.

Responsibility for the care of tuberculous patients was transferred in 1948 to Wolverhampton from the Staffordshire, Wolverhampton and Dudley Joint Board for Tuberculosis where this concerned Wolverhampton residents and a year later an after-care officer was appointed specially. She had 278 patients to supervise and the number rose gradually to its maximum of 353 in 1957. She helps them to obtain financial assistance and grants of clothing, beds and bedding, she arranges for the provision of free milk and holidays where these are required, and she helps them with housing difficulties ; where patients are fit to resume work she helps them to find suitable employment. In addition, applications are dealt with from doctors seeking convalescent home accommodation for patients suffering from conditions other than tuberculosis and in most years more than 60 are sent away. The Department also has available on loan equipment for patients nursed at home and the number making use of this service each year has increased in ten years from 160 to over 500.

Notice of the discharge of patients in maternity beds is obtained daily although for a long time this depended on enquiries initiated by the Health Department ; when necessary the municipal midwifery service assumed responsibility for their nursing. Notice of discharge from hospital is received of all children of school age and under who are visited subsequently by health visitors or school nurses when this appears desirable. Notice of home accidents treated at the Royal Hospital is received which enables the conditions leading to the accident to be reviewed. Patients leaving hospital who require nursing in the home are notified to the home

nurses so that they can provide a nursing service without delay. Patients leaving mental deficiency institutions are notified to the Health Department and they are all visited and supervised. The much greater number of patients now leaving mental hospitals also are notified, but the small staff of mental welfare officers in the Health Department permits only a small proportion of cases to be visited and these are patients whose need is known to be great.

A centralised ambulance service was established under the control of the Health Committee in July, 1945 to perform all ambulance work in the town other than that done by works ambulances and by those of the voluntary hospitals. In April, 1948 the service was merged with the Fire Brigade and the Council's functions for the combined services were delegated to the newly formed Fire and Ambulance Committee, subject to the retention by the Health Committee of a general interest in, and the ultimate responsibility for, the ambulance service.

The staff of 20 had at their disposal 9 ambulances, 3 sitting case cars and a mortuary van at the ambulance station in Penn Road. A fee of 1s 0d. a mile was charged with a minimum of 10s. 6d., but the fee was remitted in necessitous cases and no charge was made for the removal to hospital of infectious cases or for the transport of street accidents. In 1946, the first complete year of the service, 6,265 persons were conveyed a total of 57,908 miles ; in 1947 the service carried 6,176 patients 57,944 miles. The demands increased greatly following the provision of a free service in the middle of 1948, and in 1949 the service carried approximately 23,000 patients 154,000 miles. The demand has increased steadily and last year a staff of 36 with a fleet of 17 vehicles carried 45,000 patients 165,000 miles ; of this vast number of cases only 2.6 per cent were accidents and 2.6 per cent emergencies.

The major demand on the Ambulance Service, which is not intended for all people suffering from illness but only for those incapable of travelling by any other means, is made by hospital out-patients departments, and the service's misuse can be stopped only with the co-operation of the hospitals. This requires medical

staff to be available who are qualified to assess the demands of patients, both reasonable and unreasonable, for the provision of ambulances. Doctors suitable for this task must be sufficiently informed to appreciate the waste of public money resulting from the improper use of ambulances, they must be sufficiently experienced to make decisions, however unpopular, which are clinically sound, and they must be sufficiently confident to withstand even the most strident criticism. The inexperienced house officer, the studious registrar and the busy consultant devoting his time to the more complicated and recondite aspects of his speciality have proved unsuitable and the need is for a grade below that of the consultant, occupying a permanent position in the career structure of the Hospital Service.

The environment is not a direct concern of the National Health Service but its work is indissolubly linked with the conditions under which people live. It is to benefit physical and mental health that slums are demolished ; the experience of the school health, home nursing, health visiting and mental welfare sections of the health authority help to determine the need to find alternative accommodation for a particular family ; outbreaks of illness call for investigations which are not only clinical but also include enquiries into food and water supplies and environmental conditions ; it is on the experience in the field of those concerned with the National Health Service and on information relating to morbidity and mortality which the medical officer of health receives and interprets that public health inspectors can be most profitably deployed. Clearly, any consideration of a health service must include the environment in which it works and the need to modify that environment.

During the nineteenth century Wolverhampton underwent such rapid development that its population doubled between 1840 and 1870. Badly constructed houses were run up in streets, alleys and courts, the water supply was inadequate, the town was almost devoid of sewers and water closets were a rarity ; ninety years later traces of this legacy still exist. At the beginning of this century the Chief Sanitary Inspector (Mr. Peers, who held the office from 1898 to 1932), and the four District Inspectors were converting the last of the privies to water closets, were replacing

open ash pits with covered galvanised ash bins and were beginning the substitution of water closets for the pan or pail system ; they were securing the re-laying and re-paving of the surface of court-yards, with their numerous puddles and abundance of sludge in wet weather through which ill shod children and others had to wade, and with their inevitable dust clouds in dry seasons ; their representations resulted in the cleansing and lime washing of hundreds of houses in the year and the removal of over a thousand animals which were considered incompatible with the health of the people owning them ; a dozen unsafe drinking-water wells were closed and offenders were officially cautioned in respect of smoke nuisances, a practice considered to be attended with reasonably satisfactory results ; over 2,000 visits were paid to the 60 private slaughter-houses in the borough and almost 1,000 visits were paid to the cow-sheds, dairies and milk shops in the borough. In the years before the first World War increasing attention was also paid to the appalling housing conditions which were at their worst in the clusters of badly arranged dwellings in airless courts but their demolition under local Acts was limited to about 40 a year because no cheap accommodation was available for the displaced tenants ; apart from 50 flats built in Birmingham Road about 1901, no dwellings were erected by the Corporation before 1919.

Substantial progress was made in the period between the wars. Pail closet conversion interrupted by the war was finished in 1924, and this was followed immediately by the conversion of 8,500 waste water closets, a task completed in 1932. Slum clearance was pursued with vigour and over 2,400 dwellings containing 10,000 people were demolished in the areas of Faulkland Street, Brickkiln Croft, Walsall Street, Monmore Green, Moseley Village and Dale Street ; in addition over 2,600 individual unfit houses containing 7,500 people were demolished. The opening of the public abattoir in 1929 was followed by the closing by 1935 of all but one of the 18 privately owned slaughterhouses, the exception being the newly completed premises of one of the manufacturing pork butchers ; this enabled Wolverhampton to attain the so-called 100 per cent meat inspection which still is an unattained objective in some parts of the country. The requirements of the Milk (Special Designations) Order, 1923, the activities of the Milk Marketing Board and

finally discouragement of the producer-retailer during the last war contributed to the disappearance of the small retailer of milk and to the growth of the big distributors ; these changes have simplified the inspection of the town's milk supply.

The three major problems after the war were to clear the remaining slums, to secure the clean handling of food and to obtain a clean atmosphere. Slum clearance was the most urgent because over 4,000 houses recognised before the war as requiring demolition had undergone further deterioration and a large number of houses had in the meantime deteriorated to such an extent that they were beyond repair ; for several years the housing shortage precluded the demolition of any housing accommodation apart from individual houses that were almost derelict, and it was not until 1954 that clearance at the rate of 500 houses a year was undertaken. As long as these slums exist they will produce avoidable cases of illness, avoidable injury due to accidents resulting from bad design, and avoidable mental breakdown resulting from prolonged discontent, unhappiness and resentment. In order to undertake this large slum clearance programme, other activities were curtailed, a decision that has never been regretted.

The existence of the Corporation's out-of-date retail market in the middle of the town handicapped attempts to insist on higher standards of food handling in the borough. When the new market was being designed and since its construction began in 1957, care has been taken to ensure that facilities will exist for food to be handled there in a way that will leave no room for criticism. Its opening in 1960 will be a stimulus to aim throughout the town at still higher standards.

As the slum clearance programme is well advanced the time has come for an intensive effort to be directed to securing a clean atmosphere ; the initial steps have been already taken in this long and difficult task.

The estimated gross cost, including the portion borne by the local rates, of the National Health Service for England and Wales in the financial year 1958/59 is estimated to be about £650 millions,

spent in the approximate proportions of 60 per cent on hospitals, specialist and ancillary services, 30 per cent on general medical and dental services, pharmaceutical services and supplementary ophthalmic services, and 10 per cent on local health authority services. The cost of the local authority's health services in Wolverhampton in the financial year 1957/58,—the last year for which complete figures from all health authorities are available—was £1,014 per thousand of the population; the average for all county boroughs in England and Wales was £1,152. The Wolverhampton figures per thousand of the population for the main sections of the work, with the average of all county boroughs in brackets for comparison, were Care of Mothers and Young Children £195 (£190), Midwifery £111 (£89), Health Visiting £67 (£77), Home Nursing £74 (£127), Vaccination and Immunisation £5 (£14), Ambulance Services £203 (£210), Prevention of Illness, Care and After-care £22 (£45), Domestic Help £77 (£131), Mental Health £48 (£74), and Administration £203 (£177).

Since the beginning of the century the major local authorities were called upon to supervise the newly organised profession of midwifery, to undertake the medical services designed to help children of school age, to cope with tuberculosis and mental deficiency both in the home and in institutions, as well as with venereal diseases, and after the first World War to undertake additional responsibilities in relation to expectant mothers and children under school age, and to provide institutional maternity accommodation to be followed later by responsibility for domiciliary midwifery. The Home Help Service and the growth of immunisation by the staff of the local authority were further manifestations of the general trend; the transfer of the institutions of the disbanded Boards of Guardians in 1929 provided an opportunity to fill gaps in the hospital service for those authorities with the means and the mind to do so.

This general trend was reversed abruptly in 1948 when under the National Health Service Act hospitals and allied services were removed from the charge of local authorities although what were considered to be some minor duties were given to them in the form of after-care of hospital patients, the home nursing service and the ambulance service. After a lull of five years, the useful-

ness of local health authorities began to be realised. They were asked to help the hospitals by undertaking the nursing of more patients in the home ; subsequently they were asked to provide full dental treatment for expectant and nursing mothers and children under school age ; when B.C.G. was introduced local health authorities were commissioned to provide it as they were later when poliomyelitis vaccination was needed. Now the new Mental Health Bill will require local authorities to undertake duties which have not previously been imposed upon them. The trend is clear and the increasing responsibilities will result in the local rates contributing a greater amount to the cost of the National Health Service.

There are several reasons for this trend ; the prevention of avoidable illness is necessary if the health services are not to absorb an excessive proportion of the nation's resources, and preventive measures including health education can best be provided by local health authorities ; the most economical place to provide care is in the patient's home and this requires the home nursing, home help, domiciliary midwifery and mental welfare services of the local health authorities ; services can be organised most effectively through local health authorities for such vulnerable groups as expectant mothers, children of school age and under, and the aged ; experience has shown that the consumer is more likely to secure satisfaction if the purveyor of an inadequate service is easily identifiable and well within reach of criticism.

The local health authority can best contribute to the efficiency of the National Health Service by co-operating closely with both the practitioner and the hospital services. The achievement of a close, friendly and harmonious understanding between the practitioner and the health authorities is facilitated when the practitioner is called upon to co-operate with the staff of only one local health authority. The contribution which the local health authority can make to the hospitals in their effort to provide without delay a service to those who most need it is made more easily when the hospitals have to deal with only one local health authority. An obvious requirement for an economical and efficient health service is the establishment wherever possible of administrative units that

are not too large to maintain local interest but are large enough to allow the areas covered by the local health authority (including school health, welfare and the environmental services), the general practitioner service and the local hospital service to be as nearly as possible co-extensive.

Many of the developments during the last 10 years in the services of the Wolverhampton Health Department concern the welfare of mothers and young children and were due in no small measure to the work of Dr. Abigail J. M. Lesslie, Senior Medical Officer for Maternity and Child Welfare from the beginning of 1949 until 5th March, 1959 when she died in a motor accident. She came to Wolverhampton a few months after the introduction of the National Health Service and she never doubted the important part the local health authority had to play. The work of health visitors and welfare centres was pursued with vigour but it was in the field of domiciliary midwifery that her foresight and ability were most clearly displayed. Her desire to encourage the personal interest of the midwife in her patient alongside the personal interest of the patient's own doctor produced a service that was adopted by many authorities and was presented by the Association of Municipal Corporations to the Cranbrook Committee as an example of successful co-operation between the midwife, the ante-natal clinic and the general practitioner. She was a woman of wide interests who had clear opinions, enjoyed life, was scrupulously fair and accepted nothing but the best for the people her service dealt with.

I wish to express my appreciation of the co-operation of the staff of the Health Department, and on their behalf I wish to thank the Chairman and Members of the Health Committee for their continued interest, encouragement and support.

Yours faithfully,

J. F. GALLOWAY,

Medical Officer of Health.

SECTION I.

STATISTICS AND SOCIAL CONDITIONS.

A. Summary of Statistics.

1. Comparison of Statistics.

	1928.	1938.	1948.	1957.	1958.
Population	133,900	145,300	159,150	149,900	147,800
Area in Acres	7,105	9,126	9,126	9,126	9,126
Inhabited houses	21,609	39,112	42,922	46,249	46,383
Birth Rate (live) (per 1,000 population)	19.7	16.9	19.8	15.1	16.44
Death Rate (per 1,000 population)	10.7	11.3	10.4	11.4	11.22
Infant Mortality Rate (per 1,000 live births)	61	55	49	25.2	25.22
Still Birth Rate (per 1,000 total births)	—	38.4	23.3	25.0	28.99
Maternal Mortality Rate (per 1,000 total births)	1.9	4.3	1.5	1.3	0.44
Cancer Death Rate (per 1,000 population)	1.14	1.42	1.65	2.10	1.99
Tuberculosis Death Rate (per 1,000 population)	0.70	0.67	0.57	0.11	0.10
Pulmonary only	0.57	0.78	0.51	0.09	0.00
Rateable Value	£777,645	£918,712	£1,020,595	£2,191,359	£2,045,097
Product of Penny Rate	£2,948	£3,669	£4,229	£8,915	£8,188

2. Extracts from Vital Statistics of 1958.

Area of Borough				9,126 acres.
Population (Registrar-General's mid-year estimate)				147,800.
Number of inhabited houses (31st March, 1958)				46,384.
Rateable Value (31st March, 1958)				£2,045,094.
Sum represented by a penny rate				£8,186.
Live Births.	Male.	Female.	Total.	
Legitimate	1,149	1,099	2,248	
Illegitimate	99	70	169	
Total	1,248	1,169	2,417	16.4 per 1,000 population.
Still Births.				
Legitimate	35	29	64	
Illegitimate	3	5	8	
Total	38	34	72	0.5 per 1,000 population. 28.9 per 1,000 total births.
Deaths	877	772	1,649	11.2 per 1,000 population.
Natural Increase			768	
Infant Mortality.				
Legitimate	25	30	55	24.5 per 1,000 live Legitimate births.
Illegitimate	3	3	6	35.5 per 1,000 live Illegitimate births.
Total	28	33	61	25.2 per 1,000 live births.
Maternal Mortality.				
Post Partum Haemorrhage		1		
		—		
		1		0.4 per 1,000 total (live and still) births.
Deaths from Tuberculosis.				
Pulmonary	8	3	11	0.07 per 1,000 population.
Non-Pulmonary	1	3	4	0.03 per 1,000 population.
Total	9	6	15	0.10 per 1,000 population.
Deaths from Infectious Diseases.				
Influenza	6	4	10	
Gastro-enteritis	4	3	7	
Syphilitic disease	—	1	1	
Poliomyelitis	1	—	1	
Measles	1	—	1	
Whooping Cough	1	—	1	
Deaths from Cancer.	161	132	293	1.98 per 1,000 population.
Area Comparability Factors.				
Births	0.98			
Deaths	1.12			

TABLE I.

CAUSES OF, AND AGES AT DEATH DURING THE YEAR 1958.

CAUSES OF DEATH.	Net Deaths at the subjoined ages of Residents within the Borough.									
	Male. All ages.	Female. All ages.	Total. All ages.	Under 1 year.	1 and under 5 yrs.	5 and under 15 yrs.	15 and under 25 yrs.	25 and under 45 yrs.	45 and under 65 yrs.	65 and under 75 yrs. 75 yrs.
All causes	877	772	1,649	61	3	7	9	71	429	429
Tuberculosis, Respiratory	8	3	11	—	—	—	—	2	6	1
Tuberculosis, other ...	1	3	4	—	—	—	—	3	1	—
Syphilitic Disease ...	—	1	1	—	—	—	—	—	—	—
Whooping Cough ...	1	—	1	1	—	—	—	—	—	—
Meningococcal Infection	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis ...	1	—	1	—	—	—	—	1	—	—
Measles	1	—	1	1	—	—	—	—	—	—
Other Infective and Parasitic Diseases ...	2	2	4	—	—	—	—	1	2	—
Cancer of Stomach ...	21	16	37	—	—	—	—	—	8	10
Cancer of Lung, Bronchus	65	3	68	—	—	—	—	4	42	15
Cancer of Breast ...	—	42	42	—	—	—	—	1	23	12
Cancer of Uterus ...	—	7	7	—	—	—	—	—	4	2
Other Malignant and Lymphatic Neoplasms	73	61	134	—	1	1	—	9	41	40
Leukaemia, Aleukaemia	2	3	5	—	—	—	—	—	2	2
Diabetes	7	2	9	—	—	—	—	1	1	4
Vascular lesions of Nervous system ...	111	115	226	—	—	—	—	4	48	83
Coronary Disease, Angina	137	94	231	—	—	—	—	9	68	76
Hypertension with Heart Disease	17	24	41	—	—	—	—	—	7	13
Other Heart Disease ...	104	145	249	—	—	—	1	2	37	61
Other circulatory disease	29	26	55	—	—	—	—	2	10	19
Influenza	6	4	10	—	—	—	—	1	4	2
Pneumonia	62	47	109	8	1	—	—	4	22	20
Bronchitis	69	25	94	2	1	1	—	—	28	24
Other diseases of respiratory system ...	13	1	14	—	—	—	—	2	7	3
Ulcer of Stomach and Duodenum	18	3	21	—	—	—	—	2	9	5
Gastritis, Enteritis and Diarrhoea	4	3	7	—	—	—	—	—	2	3
Nephritis and Nephrosis	5	3	8	—	—	—	—	2	2	2
Hyperplasia of prostate	11	—	11	—	—	—	—	—	1	3
Pregnancy, Childbirth, Abortion	—	1	1	—	—	—	—	1	—	—
Congenital Malformations ...	6	11	17	13	—	—	—	3	1	—
Other defined and ill-defined diseases ...	62	87	149	35	—	2	2	8	29	22
Motor Vehicle accidents	12	3	15	—	—	2	4	4	3	1
Suicide	5	11	16	—	—	—	—	3	6	5
All other accidents ...	22	26	48	1	—	1	2	2	14	1
Homicide and operations of war	2	—	2	—	—	—	—	—	1	—

B. General Statistics.

1. Population.

The Registrar General's estimate of the population at the 30th June, 1958 was 147,800, a decline of 2,100 in a year.

The proportion of the population who were under 15 years of age was estimated to be 24.2 per cent; the proportion for England and Wales was 22.9 per cent.

2. Inhabited Houses.

At 31st March, 1958, there were 46,384 inhabited properties. The types of premises and their numbers were : —

Domestic	44,834
House Shops	1,210
Off-licences	53
Unlicensed hotels and boarding houses	30
Licensed premises	257

The number of additional dwellings brought into rate in the year ending 31st March, 1958 was 840 and the number taken out of assessment was 705, leaving an increase of only 135.

3. Live Births.

Live births consisted of 1,248 males and 1,169 females, a total of 2,417 (which is 153 more than in 1957) giving a birth rate of 16.4 per thousand population; when the area comparability factor of 0.98 is applied, this is reduced to 16.0 per thousand. The birth rate for the whole of England and Wales was 16.4.

Of these 2,417 births, 169 or 7.0 were illegitimate. Last year the proportion was 6.6 per cent.

4. Still Births.

These numbered 72 (of which 8 were illegitimate). These 72 represented a rate of 28.9 per thousand total births (live and still). The still birth rate for the whole of England and Wales was 21.6 per thousand total births.

5. Marriages.

The number of marriages registered in Wolverhampton during the year was 1,403, representing a marriage rate of 19.0 per thousand population. The rate for England and Wales was 15 per thousand population.

6. Deaths.

The number of deaths, comprising 877 males and 772 females, was 1,649 giving a death rate of 11.2 per thousand population; when the area comparability factor of 1.12 is applied this rate is increased to 12.5 per 1,000. The death rate for England and Wales was 11.7.

The principal causes of death were :—

(a) Diseases of the Heart and Circulation.

Vascular lesions of the nervous system	226
Coronary disease, angina	231
Hypertension with heart disease	41
Other heart disease	249
Other circulatory disease	55

802 (48.6 % of all deaths).

(b) Cancer

293 (17.8 % of all deaths).

(c) Diseases of Respiratory Tract.

Pneumonia	109
Bronchitis	94
Other respiratory diseases	14

217 (13.2 % of all deaths).

(d) Suicide and Violence.

Suicide	16
Motor vehicle accidents	15
All other accidents	48
Homicide and operations of war	2

81 (4.9 % of all deaths).

(e) Ulcer of stomach and duodenum

21 (1.3 % of all deaths).

(f) Congenital malformations

17 (1.0 % of all deaths).

(g) Tuberculosis—all forms

15 (0.9 % of all deaths).

(h) Hyperplasia of prostate

11 (0.7 % of all deaths).

(i) Influenza

10 (0.6 % of all deaths).

7. Infant Mortality.

There were 6 deaths of illegitimate infants under one year of age (or 35.5 per thousand illegitimate births) and 55 deaths of legitimate infants (or 24.5 per thousand legitimate births). The total of 61 represents an infant mortality rate of 25.2 per thousand live births. The rate for the whole of England and Wales was 22.5 per thousand live births.

8. Perinatal Mortality.

Still births numbered 72 and deaths of infants under one week of age numbered 43 giving a total of 115 perinatal deaths or 46.2 per thousand live and still births.

9. Maternal Mortality.

One maternal death occurred ; the patient, a Jamaican aged 35 died of shock due to hæmorrhage associated with a difficult delivery. As there were 2,489 live and still births, this death gave a maternal mortality rate of 0.40 per thousand total (live and still) births. The rate for England and Wales was 0.43, including deaths due to abortion.

10. Deaths from tuberculosis.

There were 15 deaths from tuberculosis representing a tuberculosis death rate of 0.10 per thousand population, the lowest yet recorded in Wolverhampton. The rate for England and Wales was 0.1 per thousand.

Respiratory tuberculosis was responsible for 11 of these deaths ; 8 were males and of these one was aged 40 years and the remainder were aged 45 or over ; three were females and of these one was aged 26 years and the other two were over 45 years.

The four deaths from non-pulmonary tuberculosis were of a male of 28 years with tuberculous pericarditis and of females of 27 years with mediastinal tuberculous lymphangitis, 38 years with a tuberculoma of the brain and 47 years with tuberculosis of the kidneys and hip.

11. Deaths from Infectious and Notifiable Diseases.

There were 109 deaths from pneumonia (representing 0.74 per thousand population) but only a small proportion of these deaths occurred among the 80 cases of pneumonia which were notified ; 54 of the deaths were of patients aged 75 years or more.

In addition to 15 deaths due to tuberculosis and 10 deaths due to influenza, other deaths from infectious diseases included a man aged 38 years who died of polioencephalitis, a male mongol infant of 8 months who died of whooping cough, a male infant of 5 months who died of measles encephalitis and a female of over 80 who died of a syphilitic lesion of the aorta. There were 7 deaths from gastritis, enteritis and diarrhoea, but none was in a child.

12. Deaths from Cancer.

There were 293 deaths from Cancer giving a death rate of 1.98 per thousand population ; for England and Wales the rate was 2.12. Of these deaths 161 occurred in males and the more frequent sites of the disease were lungs and bronchi (65 cases), stomach (21 cases), large intestine (18), prostate (10) and rectum (9).

Among the 132 deaths which occurred in females the most frequent sites of the disease were the breast (42 cases), stomach (16 cases), large intestine (16), rectum (12) and uterus (8).

The death rate from cancer of the lung and bronchus was 0.46 per thousand ; for England and Wales it was 0.44.

13. Sickness Claims.

New claims for sickness benefit (excluding industrial disease or industrial injury claims) submitted to the Wolverhampton office of the Ministry of National Insurance during 1958 numbered 31,618 with a weekly average of 608 ; the most claims in a week were 1,123, 894 and 890, which occurred in the weeks ending 7th, 21st and 28th of January ; the fewest claims in a week were 223 and 328 which occurred in the weeks ending 5th and 12th August. The weekly average of 608 was substantially less than that of 1957 which at 739 was exceptionally high due to the influenza epidemic in the autumn.

14. Cremation.

A total of 1,563 cremations took place, an increase of 292 on last year's figure. The total included 572 persons resident in Wolverhampton who accordingly constituted 36.6 per cent of those cremated. They represented 34.7 per cent of all Wolverhampton deaths.

Post-mortem examinations were carried out in 358 cases; 211 were at the request of the coroners, and of these 130 were performed by expert pathologists. Three post-mortem examinations made at the request of the medical referee were all performed by expert pathologists. On no occasion was cremation refused.

Between the 12th June, 1954 when the Crematorium was opened and the 31st December, 1958, 5,319 cremations have taken place. Of these 2,151 or 41 per cent were from Wolverhampton, 1,723 or 32 per cent were from areas contiguous to Wolverhampton (Bilston 4.6 per cent, Cannock 4.4 per cent, Wednesfield 4.4 per cent, Coseley 4.3 per cent, Seisdon 4.0 per cent, Willenhall 4.0 per cent, Sedgley 3.6 per cent and Tettenhall 2.9 per cent) and 1,445 or 27 per cent were from further afield, mainly the Shrewsbury, Stafford, Wellington, Rugely, Bridgnorth, Wall Heath, Kingswinford, Stourbridge and Kidderminster areas.

C. Natural and Social Conditions.

1. Situation.

Wolverhampton stands astride a ridge which is the water-shed between the Severn and Trent; to the east the land slopes down to and merges with the industrial area of the Black Country, and to the west it spreads out to the Shropshire plain. The highest points in the borough, about 600 feet above sea level, are in Bushbury to the north and Upper Penn to the south; the lowest points, less than 350 feet above sea level, are in the vicinity of the airport and racecourse.

2. Meteorology.

Rainfall recorded at the West Park amounted to 31.27 inches, which is 5.63 inches more than the total for 1957 and 3.41 inches above the average annual rainfall calculated over the sixty-one years during which records have been kept by the department.

Rain was measured on 196 days, and the highest rainfall recorded for one day was 1.08 inches on the 2nd June ; 0.80 inches fell on the 1st July. The wettest months were June and July with 4.51 and 4.52 inches respectively, rainfall being recorded on 19 days in each month ; it was the wettest June since 1912. The rainfall for the "summer months" of June, July, August and September amounted to 15.06 inches, which represented approximately half the year's total. Rain fell on 14 and 19 days respectively during August and September. On the 1st and 2nd November, a total of 1.01 inches of rainfall was recorded, and this amount was half of the month's aggregate.

The driest month was April with 0.66 inches, half of which fell on the 25th with the remainder being recorded on seven other days ; in 1957 the fourth month was also the driest (0.14 inches). The longest period without rainfall was the middle of March when no rain was recorded on eleven successive days ; during the second half of October there was a dry spell of ten days, while at the latter end of August continuing into very early September a warm dry spell of nine days was experienced. Snow fell on five days during each of the first two months of the year, on six days during the first half of March and on one day in December.

The hottest day of the year was the 8th July when a shade temperature of 79.0° was recorded whilst the lowest temperature registered was 17.0° on 23rd January. Shade temperatures of over 70.0° were recorded on twenty-seven occasions.

Temperatures below freezing point were recorded on 48 occasions. The nights during March were unusually cold ; during the period 6th to 23rd, the minimum temperature fell below freezing point on 16 occasions and for the night of 10th March there was a reading of 18.5° . The month was drier than average with a rainfall of 1.33 inches ; the March average is 1.83 inches. Only .32 inches fell in the first twenty-three days, and there were eleven consecutive days without rainfall from 13th to 23rd March. For the greater part of the month, a drying easterly wind was prevalent.

3. Water Supply.

The Wolverhampton Corporation Water Undertaking which supplies a population of approximately 264,950 in Wolverhampton and some surrounding districts, obtains its water from several sources. These and the daily average million gallons taken from them in 1958 are :—

Cosford Works—river	1.829
Cosford Works—well	2.062
Tettenhall Works—boreholes	0.944
Dimmingsdale Works—boreholes	2.419
Hilton Works—boreholes	2.991
Stableford Works—boreholes	1.135
Goldthorn Hill Works—well	—
Purchased	0.219

The total hardness, in parts per million, varies from 212 in the Cosford Well Water to 327 in the water from the Stableford Works.

The figures of fluorides as parts per million of flourine are as follows :—

Cosford—River Worfe—filtered water	0.11
Cosford—well	0.06
Dimmingsdale—No. 1 borehole	0.08
Dimmingsdale—No. 2 borehole	0.07
Hilton—No. 1 borehole	0.03
Hilton—No. 2 borehole	0.04
Tettenhall—No. 1 borehole	0.01
Tettenhall—No. 2 borehole	0.01
Stableford—No. 4 borehole	0.05

Of 869 samples of water subjected to bacteriological examination 823 or 94.7 per cent contained no coliform organisms per 100 ml.

4. Occupations.

The principal industries arranged according to the numbers employed are vehicles (including aircraft and components, cycles etc.); mechanical and electrical engineering; metal goods manufacture; distributive trades; building and civil engineering; metals manufacture; professional services; transport (including public transport); miscellaneous services, including

sports, entertainments, catering, domestic services etc. ; rubber ; public administration (national and local government) ; food, drink and tobacco ; catering hotels etc ; textiles.

5. Unemployment.

The trend of unemployment in the Wolverhampton district during 1958 was upward ; the steepest increases were experienced in spring and autumn with a levelling off towards Christmas. The total registered as unemployed rose from approximately 0.9 per cent at the beginning of the year to 2.4 per cent and this would appear to indicate a level of unemployment towards the end of the year approximating to or slightly above the national average.

SECTION II.

HEALTH SERVICES OF THE AREA.

A. Hospital, Specialist and Allied Services.

1. Hospitals.

The Wolverhampton Hospital Management Committee is responsible for institutions and clinics in an area extending from Wolverhampton to Bridgnorth, Much Wenlock, Broseley and Shifnal, with an estimated population of 355,000. The institutions contain 2,069 beds ; of these, 1,783 are in Wolverhampton, including 400 beds in "The Poplars," where the Management Committee provides serviced accommodation for the use of aged non-sick people, and 80 beds in the Reception Centre which also are serviced by the Hospital Management Committee. Both "The Poplars" and the Reception Centre are adjacent to New Cross Hospital.

The following 1,303 hospital beds are in Wolverhampton :—

New Cross Hospital	634
Royal Hospital	313
Women's Hospital and Annexe	88
Parkfields Hospital	66
Queen Victoria Nursing Institute	43
Children's Hospital, Penn	30
Women's Convalescent Hospital, Penn	13
Eye Infirmary	100
Beeches Maternity Home	16

In addition to providing hospital facilities for Wolverhampton, these beds meet almost all the hospital requirements of the Borough of Bilston and the Urban Districts of Tettenhall, Wednesfield and Willenhall. They also constitute the main provision of hospital accommodation for the Urban District of Coseley and the Rural District of Seisdon.

2. Sanatoria.

The Parkfields Hospital contains 54 beds for tuberculous patients and only 12 beds now are allocated to the treatment of infectious diseases. There is no sanatorium accommodation in the area built specially for the treatment of tuberculosis, and pulmonary cases usually receive treatment at Prestwood, Kinver or Himley ; cases requiring long-stay orthopædic treatment usually obtain it at Oswestry or Yardley Green Hospital, Birmingham.

3. Chest Clinic.

The centrally situated Clinic in Bell Street provides facilities for following up cases of chronic chest disorders in Wolverhampton and District.

Diagnostic out-patient clinics for chest conditions are held at the Royal Hospital and at New Cross Hospital, where the weekly mass radiography sessions provide an X-ray exclusion service for general practitioners. Over a third of the newly recognised cases of pulmonary tuberculosis had been sent originally to the exclusion service.

4. Venereal Diseases Clinic.

This is situated at the Royal Hospital, Wolverhampton, and serves both Wolverhampton and the surrounding district.

5. Nursing Homes.

The only private maternity home (which re-opened in April) contains fourteen beds, and the only private nursing home contains two beds.

6. Bacteriology.

Laboratory facilities are available at the Public Health Laboratory, Stafford, and at the Pathological Laboratory of the Royal Hospital, Wolverhampton. Most specimens from the health department must still be sent to Stafford at considerable inconvenience because the establishment of a much needed Public Health Laboratory in Wolverhampton continues to be delayed.

B. Local Executive Council Services.

1. General Medical Service.

At the end of March, 1959 there were 153,453 people recorded as living in Wolverhampton on doctors' lists. Their medical care was undertaken by 131 principal and 9 assistant medical practitioners, 57 of whom live within the borough. There are 57 surgeries within the borough from which doctors practise.

The cost of this service for the year ending 31st March, 1959 was £217,014 equivalent to 29/4 a head of the population of 147,800 living in Wolverhampton.

2. Pharmaceutical Service.

At the end of March, 1959, there were under contract and in the borough of Wolverhampton 43 pharmacies, 7 surgical appliance suppliers and one drug store. The Executive Council tests the dispensing of all these contractors over a period of two years, and in the year under review 22 drug tests and 5 appliance tests were made.

The cost of this service to the Executive Council for the year ending 31st March, 1959 was £195,298 and to the patients £40,092, being equivalent to 26/5 and 5/5 a head per annum respectively.

3. Dental Service.

At the end of March, 1959 there were 39 principal and 4 assistant dental practitioners on the Executive Council's list. The cost to the Executive Council for the year ending 31st March, 1959 was £158,742 and to the patients £45,385 being equivalent to 21/6 and 6/2 a head per annum respectively.

4. Ophthalmic Service.

The service enables the patient to have his sight tested by either an ophthalmic medical practitioner or an ophthalmic optician and then, if glasses are necessary, to have them provided either by an ophthalmic optician or a dispensing optician. There were at the end of March, 1959 under contract with the Ophthalmic Service Committee 7 principal and one assistant ophthalmic medical practitioners, 14 ophthalmic opticians and 9 dispensing opticians. Dr. N. A. Jevons, Senior Assistant School Medical Officer, is one of the ophthalmic medical practitioners and prescribes spectacles for school children who require them.

The cost to the Executive Council for the year ending 31st March, 1959 was £40,791 and to the patients £23,918, being equivalent to 5/6 and 3/3 a head per annum respectively.

5. General.

The cost of administration for the year ending 31st March, 1959 was £9,320 equivalent to 1/3 a head of the population. The total cost of the services therefore was £621,165, equivalent to £4 4s. 1d. a head of the population. In addition, the direct contribution made by the patients was £109,393, equivalent to 14/10 a head of the population.

C. Local Authority Health Service.

1. Care of Mothers and Children.

(a) Births and Still-Births.

There were 2,417 infants born alive during the year to parents normally resident in Wolverhampton; of these infants 1,314 were born at home and 1,103 in institutions. The still births numbered 72 and of these, 21 were born at home and 51 in institutions.

The percentages of these births which took place at home in 1955, 1956, 1957 and 1958 were 49, 49, 51 and 54 respectively.

(b) Ante-natal Facilities.

At the end of the year, 9 ante-natal clinics were conducted each week by medical officers (all of whom are full-time members of the Health Department), with the assistance of midwives. There

is no specialist ante-natal clinic, but cases requiring a second opinion are referred through the general practitioner to the consultant clinics at New Cross Hospital or the Women's Hospital. Blood examinations for the rhesus factor and the Wasserman test are carried out at the ante-natal clinics on all expectant mothers. Instruction in mothercraft is given at the infant welfare centres, and to a lesser extent at the ante-natal clinics.

Unmarried mothers are interviewed by the superintendent health visitor and given any help which may be required, including if necessary admission ante-natally to a mother and baby home. Arrangements are made with the medical officers of the Health Department for blood tests to be done, and the ante-natal care of the patient is undertaken either by the clinic or by her own doctor.

Maternity outfits are issued at all clinics to patients on the presentation of a note from either the general practitioner or the domiciliary midwife. In addition, each midwife retains two maternity outfits in her own home for use in an emergency, and these are renewed as they are used. As 1,330 maternity packs were issued in 1958 all patients confined at home appear to have received them.

Ante-natal clinics, at which midwives are present, were attended by 2,612 women, of whom 2,129 were new cases, and an average of 3.9 visits was made by each patient. The new cases again far exceed the number of domiciliary confinements and are equivalent to 86 per cent of all confinements, both domiciliary and institutional, of Wolverhampton residents.

(c) Post-natal Care.

A weekly post-natal clinic, conducted by a hospital specialist is provided by the Health Department at Lowe Street welfare centre ; in addition, post-natal examinations are carried out by the general practitioners and at the hospital post-natal clinics. Only a small proportion of mothers confined at home subsequently attend the Lowe Street clinic ; new cases attending in 1958 were 41 compared with 52 the previous year. The number of attendances was 117.

(d) Family Planning Clinic.

Married women referred by medical practitioners are admitted to the clinic held weekly at Lowe Street welfare centre where they are advised on methods of birth control. In the years 1956, 1957 and 1958 women attending for the first time numbered 66, 43 and 78 respectively, and the corresponding numbers of attendances were 810, 719 and 724 respectively.

(e) Child Welfare Centres.

Each week 13 sessions are held for infants and toddlers at 8 centres. Immunisation against diphtheria and whooping cough, vaccination against smallpox and tuberculin patch tests are carried out at these clinics. Approximately 67 per cent of children under one year of age in the town attended them.

Minor ailments of children under school age are treated by arrangement at the minor ailment clinics of the School Health Service, and in addition, special pædiatric, orthopædic and ultra-violet light clinics are held jointly with that Service.

The pædiatric clinic, to which children in need of specialist advice may be referred from the infant welfare centres, is held fortnightly.

The orthopædic clinic, to which children with minor deformities are sent from the welfare centres, is held weekly. After examination by the orthopædic surgeon, the prescribed treatment is carried out by a physiotherapist, who attends the clinic daily. During the year 446 attendances were made by 285 children of whom 170 were attending for the first time.

The ultra-violet light clinic is held twice weekly and children suffering from conditions likely to benefit are referred to it from the welfare centres. During the year 25 cases made 122 attendances.

On 29th November, 1958, the first session was held in the new Centre at Probert Road, Oxley, the first to be specially built since 1931. It was opened officially on 11th December, 1958 by Sir John Charles, Chief Medical Officer of the Ministry of Health.

The average cost of welfare centres per thousand population for the 83 county boroughs of England and Wales for 1957/58 was £79 1s. 0d.; in Wolverhampton it was £83 10s. 0d.

MATERNITY AND CHILD WELFARE CENTRES, 1958

	Ford-houses	Oxley	Lea Road	Lowe Street	Park Lane	St. Oswalds	St. Martins	Ward Street	Masefield Road	Totals
INFANTS.										
No. of sessions ...	90	9	99	49	99	103	52	100	49	650
New cases under 1 year ...	204	20	319	204	162	205	92	214	106	1,626
Attendances under 1 year ...	1,965	182	3,688	1,701	2,570	2,409	1,039	1,982	944	16,480
Attendances over 1 year ...	817	60	546	309	400	885	221	672	260	4,170
Total Attendances ...	2,782	242	4,234	2,010	2,970	3,294	1,260	2,654	1,204	20,650
Average attendances per session ...	30.9	26.9	42.8	41.0	30.0	32.0	24.2	26.5	24.6	31.8
ANTE-NATAL.										
No. of sessions ...	44	5	101	50	49	52	52	51	49	453
New cases ...	237	23	392	335	369	178	145	283	167	2,129
Total Attendances ...	1,300	113	1,665	1,355	1,434	983	821	1,450	940	10,061
Average attendances per session ...	29.5	22.6	16.5	27.1	29.3	18.9	15.8	28.4	19.2	22.2

POST-NATAL CLINIC

(Lowe Street)	
No. of sessions ...	46
New cases ...	41
Total attendance ...	117
Average per session ...	2.5

FAMILY PLANNING CLINIC
(Lowe Street)

No. of sessions ...	49
New cases ...	78
Total attendances ...	724
Average per session ...	14.8

(f) Infant Deaths.

There were 64 deaths of children under 5 years ; of these, 61 failed to survive the first year, and of these 43 failed to survive the first month ; 38 died in the first week. The causes of death are given below :—

Cause of Death.				Days.	Weeks.	Months.	Years.
				0—7	1—4	1—12	1—4
Whooping Cough	...	...	...	—	—	1	—
Measles	...	...	...	—	—	1	—
Wilms tumour of kidney	...	...	...	—	—	—	1
Pneumonia	...	...	...	2	1	5	1
Bronchitis	...	...	...	—	—	2	1
Congenital malformations	...	...	...	4	3	6	—
Intracranial and spinal injury at birth (cerebral hæmorrhage) without immaturity	...	...	...	6	—	—	—
Intracranial and spinal injury at birth (cerebral hæmorrhage) with immaturity	...	...	...	6	1	—	—
Postnatal asphyxia and atelec- tasis without immaturity	...	...	...	5	—	—	—
Postnatal asphyxia and atelec- tasis with immaturity	...	...	...	3	—	—	—
Birth injury without immaturity	...	...	...	2	—	—	—
Birth injury with immaturity	...	...	...	2	—	—	—
Pulmonary hæmorrhage due to prematurity	...	...	...	1	—	—	—
Immaturity	...	...	...	6	—	—	—
Intussusception	...	...	...	—	—	1	—
Acute otitis media	...	...	...	—	—	2	—
Ill-attention at birth and prematurity	...	...	...	1	—	—	—
Totals				38	5	18	3

(g) Premature Infants.

The premature baby nurse visits all premature infants in their homes, the frequency of her visits depending on their weight and condition ; special cots and equipment are lent from the Health Department by the premature baby nurse.

All infants weighing $5\frac{1}{2}$ lbs. or less born at home or in nursing homes are notified to the premature baby nurse on the day of birth. General practitioners usually arrange for babies weighing less than 4 lbs. to be admitted to a premature baby unit at the Women's Hospital (Wolverhampton), Hallam Hospital (West Bromwich) or Sorrento Hospital (Birmingham) and special equipment is kept at the ambulance depot for use in transporting them.

During the year, 189 babies were born alive weighing $5\frac{1}{2}$ lbs. or less to mothers normally resident in Wolverhampton and 160 of them survived 28 days. Of these 189 babies, 53 were born at home, 3 in private nursing homes and 133 in National Health Service hospitals ; 12 of the babies born at home were transferred subsequently to hospital and the remaining 41 were nursed entirely at home.

The birth weight (column I) of all premature babies born alive at home (column II), the number of these nursed entirely at home (column III) and the number surviving 28 days (column IV) are shown in the following table :—

I.	II.	III.	IV.
3 lbs. 4 ozs.	5	3	3
3 lbs. 4 ozs.—4 lbs. 6 ozs.	10	5	9
4 lbs. 6 ozs.—4 lbs. 15 ozs.	5	3	5
4 lbs. 15 ozs.—5 lbs. 8 ozs.	33	30	30
	<hr/>	<hr/>	<hr/>
	53	41	47
	<hr/>	<hr/>	<hr/>

38 of the 41 babies nursed entirely at home, and 2 of the 3 babies born in private nursing homes survived the first 28 days.

The premature baby nurse paid 1,303 visits to babies born at home and to babies discharged from hospital or nursing homes.

No case of retrolental fibroplasia was notified.

(h) Illegitimate Children.

There were 169 illegitimate children born alive during the year; there were also 8 illegitimate still births. This total of 177 illegitimate live and still births represents 7.1 per cent of all live and still births. The local authority continues to make grants to the Legge Home and the Hay Home of £246 and £100 annually respectively. When required, patients are admitted to Diocesan Moral Welfare or Roman Catholic or Salvation Army Homes; necessary financial assistance is provided to meet the charges.

During the year the help of the Health Department was sought in 73 cases (59 being new cases) and 24 of them were accommodated in mother and baby homes.

The average cost of mother and baby homes per 1,000 population for the 83 county boroughs of England and Wales in the year 1957-58 was £5 18s. 0d.; in Wolverhampton it was £3 5s. 0d.

(i) Ophthalmia Neonatorum.

Two cases were notified by general practitioners. One child had been born in a nursing home and the other at home. Both recovered.

(j) Supply of Welfare Foods.

At the end of the year the distribution centres for welfare foods in Wolverhampton comprised the main centre at the Health Department, all clinics, 10 shops in various parts of the borough where the proprietors granted facilities, and the Community Centre at Low Hill.

In addition to the welfare foods supplied under the Government Welfare Foods scheme proprietary brands of infant foods and nutrients are obtainable at all clinics if they have been prescribed.

At the end of the year the staff consisted of the organiser, one assistant and 4 part-time workers.

Below is a summary of the issues of Government Welfare Foods made during each quarter of the year :

Quarter ended.	National dried milk. Tins.	Cod liver oil. Bottles.	A. & D. tablets. Packets.	Orange juice. Bottles.	Total.
31.3.58	17,685	2,905	2,116	18,996	41,702
30.6.58	17,527	2,607	2,148	21,279	43,561
30.9.58	16,955	2,302	2,003	21,472	42,732
31.12.58	16,588	2,871	2,021	17,845	39,325
Total for 1958	68,755	10,685	8,288	79,592	167,320
Total for 1957	80,520	15,569	8,419	116,448	220,956

During the year the decrease in issues of national dried milk resulted from a steep increase in price, and the falling off in issues of orange juice is accounted for by issues being made only to children under two years of age instead of under five years as in 1957. Although the actual units issued shows a considerable reduction, the cash takings for 1957 and 1958 were £9,688 and £9,406 respectively.

(k) Dental Care.

The Principal Dental Officer reports that during the year the priority service for expectant and nursing mothers and pre-school children continued to be provided by the authority's dental officers devoting a part of their time to these patients. The equivalent of 301 half days was spent on their work. The additional evening sessions instituted in the previous year continued to be popular with many patients who find it more convenient to attend at a time when their husbands are at home to take charge of the family.

The service for pre-school children is provided on request and although all forms of treatment are available the demand is in the main for the relief of toothache.

The following were provided with dental care :—

	Examined.	Needing treatment.	Treated.	Made dentally fit.
Mothers	349	336	278	107
Children	535	513	511	—

The following forms of dental treatment were provided :—

	Mothers.	Children.
Scaling and gum treatment	160	—
Fillings	320	7
Silver nitrate treatment	—	31
Crowns and Inlays	4	—
Extractions	1,364	901
General anæsthetics	166	494
Dentures provided :—		
Full upper or lower	107	—
Partial upper or lower	63	—
Radiographs	78	1

(I) Day Nurseries.

The day nurseries at Bushbury Road and Birmingham Road have accommodation for 75 children and 40 children respectively, and both provide facilities for the training of nursery students for the Certificate of the Nursery Nurses Examination Board.

The charge is 2/- each day for children in the priority group, which includes the children of widows, widowers, unmarried mothers and separated or divorced parents ; children from families in which the mother is ill, the father unemployed, incapacitated or in the Forces and cases referred by the pædiatrician. The charges for other cases, which are admitted with the consent of the Health Committee, vary with the means of the parents, with a maximum of 8/- a day.

The following is a summary of the attendances at the nurseries during the year.

	Bushbury Road.	Birmingham Road.
Number of days open	252	252
Attendances under 2 years	3,104	2,454
Attendances 2—5 years	9,121	5,536
Average daily attendance under 2 years	12.3	9.7
Average daily attendance 2—5 years	36.1	22.1

The average daily attendance of all ages at Bushbury Road was 48.5 and at Birmingham Road 31.7 ; in the previous year these figures were 41.3 and 31.2 respectively. During the past year the total attendance at the two day nurseries has increased from 18,179 to 20,215 with 60.5 per cent at Bushbury Road and 39.5 per cent at Birmingham Road.

The average cost of day nurseries per 1,000 population for the 83 County Boroughs of England and Wales in the year 1957—1958 was £86 6s. 0d.; in Wolverhampton it was £93 12s. 0d.

2. Midwifery.

(a) General Provisions.

During the year 3,878 confinements took place in the borough ; of these 1,324 were in the mother's home, 2,429 were in Hospital Management Committee institutions and 125 in private nursing homes.

Notifications of intention to practise midwifery in Wolverhampton were received from :

(i) Midwives in Managment Committee institutions	38
(ii) Municipal midwives	21
(iii) Domiciliary midwives (private)	1
(iv) Midwives in private nursing homes	3
(v) Maternity nurses in the Queen Victoria Nursing Institution	25

Supervision is exercised by the Senior Medical Officer for Maternity and Child Welfare in her capacity as Medical Supervisor, and by the Non-medical Supervisor of Midwives.

(b) Municipal Midwives.

At the end of the year the staff consisted of the non-medical supervisor, 20 midwives and a premature baby nurse. The midwives attended 1,123 cases as midwives and 198 cases as maternity nurses ; the doctor being present at 15.0 per cent of deliveries. Altogether 28,351 visits were paid by midwives to women delivered at home including 5,071 ante-natal visits ; in addition 856 patients discharged from hospital before the fourteenth day received 5,063 visits during the remainder of the lying-in period. Medical aid was sought by municipal midwives in 310 cases comprising 13 patients during pregnancy, 189 patients during labour, 36 patients after the birth and 72 infants (in 8 cases immediately after birth).

All municipal midwives are trained to administer analgesia and every midwife has apparatus for administering trilene. The "Minnit" gas and air apparatus also is used and is transported to the patient's home and subsequently collected after use by the central ambulance depot. Trilene was administered to 1,066 patients (81 per cent of confinements attended by municipal midwives) gas and air was administered to 52 patients (4 per cent of confinements) and pethidine was administered to 950 patients (72 per cent of confinements). Compared with the previous year, the changes are an increase in the proportion of patients receiving pethidine from 64 per cent to 72 per cent, an increase in the proportion receiving trilene from 69 per cent to 81 per cent and a decrease in the proportion receiving gas and air from 15 per cent to 4 per cent.

Municipal midwives deliver about six cases each month and they attend the ante-natal clinics in their area to book and examine their patients, so that each patient meets not only the midwife who probably will look after her but also the relief midwife ; in addition the midwife visits the patient's home at least twice, once early in pregnancy to ascertain that it is suitable for a domiciliary confinement, and again later in pregnancy to confirm that adequate arrangements have been made. Expectant mothers seeking admission to hospital on social grounds apply to the Health Department and subsequently they are visited in their homes by a midwife

who reports on the conditions and circumstances ; the reports are considered by the medical and non-medical Supervisors who then select those most urgently needing the available hospital accommodation.

Five classes are held each week for instruction of the expectant mother by a midwife and a health visitor. At the same time the patients receive instruction in relaxation from a physiotherapist. The classes are held at Lea Road (twice weekly), Ward Street, Park Lane and since December at Oxley Health Centre ; 457 mothers made 3,552 attendances.

Chest X-ray examinations carried out by the mass radiography unit are available for all expectant mothers.

Four midwives attended refresher courses during the year and one attended a parentcraft teaching course. No arrangements exist in Wolverhampton for providing pupil midwives with Part II training but the hospitals and the local authority still hope to be able to provide this in the near future, as the alterations in the maternity wards at New Cross Hospital, a prerequisite to recognition for training, which started last year are proceeding.

The average expenditure on domiciliary midwifery per 1,000 population for the 83 County Boroughs in England and Wales for 1957/58 the last year for which statistics are available, was £89 5s. 0d. In Wolverhampton the expenditure was £110 14s. 0d. This figure, substantially above the average, is due to the unusually high proportion of domiciliary confinements (for which the local health authority is responsible), and the corresponding unusually low proportion of institutional confinements (for which the hospital service is responsible). This is confirmed by comparing the average cost per maternity case attended in all County Boroughs, £12 19s. 0d., with the cost per case in Wolverhampton, £12 1s. 0d.

3. Health Visiting.

The establishment is a Superintendent and 16 Health Visitors. At the end of the year the staff consisted of a Superintendent, 13 Health Visitors and two Clinic Nurses. The two clinic nurses were attached to the Chest Clinic and devoted their entire time to the patients attending the Clinic and their contacts. In addition

to instructing and advising mothers at the ante-natal and infant welfare sessions, and visiting expectant and nursing mothers and children under school age, the health visitors undertake many other duties. These include visiting cases of infectious disease, patients discharged from hospital and in need of after-care and elderly people who may require domestic and other assistance in the home. They stress the importance of immunisation and vaccination, they co-operate with hospitals and general practitioners by furnishing relevant details of home conditions and ensuring that advice and treatment are carried out. Particular attention is given to families presenting a social problem. Many visits were paid to young workers taking part in the Medical Research Council's B.C.G. investigation, and much time was put in on sessions devoted to poliomyelitis vaccination.

Details of the visits made during 1958 are given below :—

Expectant mothers	511
Children under one	8,973
Children aged one and under two	5,886
Children aged two and under five	10,018
Tuberculous households	2,535
Other cases	2,209
	<hr/>
Total visits	30,132
	<hr/>

In addition, health visitors attended 2,618 half-day sessions at the clinics.

During the course of the year, health visitors entered 22,591 households (i.e. 49% of all households in the borough) and they visited 12,161 children under 5 years of age.

Two health visitors attended refresher courses during the year.

A health visitor is present at the Royal Hospital each week when the pædiatrician does a ward round, and another visits the two local Mother and Baby Homes weekly to advise on feeding etc., and to give mothercraft talks.

The average cost of health visiting per 1,000 population for the 83 County Boroughs of England and Wales in the year 1957/58 was £77 3s. 0d.; in Wolverhampton it was £67 1s. 0d.

4. Home Nursing.

At the end of the year, the staff consisted of a superintendent, 12 full-time state registered nurses, 2 full-time state enrolled assistant nurses and 6 part-time state registered nurses.

All general practitioners in the area use the service ; they either telephone to the superintendent informing her of the patients' requirements, or leave a note with relatives' instructing them to deliver it to the Health Department. When a patient about to be discharged from hospital will require nursing treatment after returning home, the hospital almoner usually notifies the home nurses in advance. The number of new cases attended by the nurses, 1,367, was slightly less than in the previous year but the total number of visits was 2% greater. A summary of the work of the nurses is given below :—

Cases on Register at 1.1.58.	New Cases.	Total Visits.	Cases on Register at 31.12.58.
254	1,367	41,600	245

The nature and number of the cases and the number of visits they received were :—

Cases.	Number.	Visits.
Medical	1,074	30,804
Surgical	264	7,153
Infectious	—	—
Tuberculous	60	2,951
Maternity (Complications)	2	15
Other	231	677
Total	1,631	41,600

Children under 5 years of age (4.2% of all patients) received 0.7% of all visits with an average of 4 visits a case ; patients between 5 and 64 years of age (41.3% of all patients) received 37% of all visits with an average of 23 visits a case ; patients of 65 years of age and over (54.4% of all patients) received 62% of all visits with an average of 29 visits a case.

In the last five years the number of children visited by the home nurses has fallen substantially resulting in children declining from 8% to 4% of all patients ; this change probably is associated with the increasing administration of penicillin by mouth instead of by injections given by home nurses. The rapid decline in the number of visits paid to tuberculous patients continued during the year, when the number of visits was 28% less than in the year before ; in 1955, 1956, 1957 and 1958 these visits numbered 12,923, 7,011, 4,088 and 2,951 respectively.

Much of the work of the home nurses involves the administration of drugs by injection and during the year they made 11,232 visits to give injections to 410 patients. The largest group of injections, 4,433, were of insulin given to 43 patients ; 2,612 were of streptomycin given to 62 patients ; and the remaining 4,187 injections given to 305 patients consisted largely of antibiotic, diuretic and vitamin drugs.

In the financial year 1957-58, the last year for which collective figures are available, the home nursing service in Wolverhampton cost £74 2s. 0d. per thousand population ; the average for the 83 county boroughs in England and Wales was £126 18s. 0d.

5. Vaccination and Immunisation.

(a) Vaccination against Smallpox.

During the year 1,068 persons were vaccinated and 61 re-vaccinated. Of those vaccinated, 959 were under one year old, and of those re-vaccinated, 60 were 15 years old and over. Medical officers of the local authority carried out 589 of the 1,129 vaccinations and re-vaccinations.

There were 2,417 infants born alive during the year and the 959 vaccinations under one year old represented 40% of these births.

(b) Immunisation against Diphtheria.

A total of 2,479 children were immunised against diphtheria during the year. Private practitioners carried out 504 of the immunisations and 1,957 were done by medical officers of the local

authority in schools, clinics and day nurseries. In addition, reinforcing doses were given to 2, 356 children mostly in schools. The estimated percentage of the child population immunised against diphtheria is :—

(i) under one year old	...	...	...	44.6%
(ii) 1—4 years old	...	...	...	53.7%
(iii) 5—14 years old	...	...	...	71.4%
(iv) Total, under 15	...	...	...	65.1%

(c) Immunisation against Whooping Cough.

This is available at all clinics where 672 children received it. A further 418 children are known to have been immunised by general practitioners. Of this total of 1,090 children, 1,064 were immunised with a combined antigen, and 26 with pertussis vaccine alone.

(d) B.C.G. Vaccination.

During the year B.C.G. vaccination against tuberculosis was offered to all 13 year old pupils in grammar schools and secondary modern schools. Consent forms were issued to the parents of 2,540 children ; there were 1,919 acceptances (75%) and of these 1,587 were X-rayed and 1,381 vaccinated.

Those not vaccinated numbered 538 and comprised :—

absentees	...	...	...	...	150
unsuitable for testing	...	...	...	...	36
positive Mantoux tests	...	...	...	...	248
not read	...	...	...	...	49
negative, but not vaccinated	...	...	...	...	55
					538

In addition, two absentee sessions were held when 225 absentees were examined and of these 117 were vaccinated bringing the total number of vaccinations in 1958 by local authority medical officers to 1,498.

At Dr. Aspin's request 92 contacts included in the 1,919 acceptances were X-rayed and Mantoux tested prior to being referred to the Chest Clinic, where B.C.G. vaccination was given under his supervision to suitable cases. These were in addition to the 1,498 previously mentioned.

Of the 1,587 pupils aged 13 years who had X-ray examinations in connection with B.C.G. vaccination, 22 were found to have abnormal X-rays.

Two 13 year old children were known to be away from school with tuberculosis during 1958.

In addition to the vaccination offered to school leavers 558 contacts were examined under the hospital service. Of these 391 had negative skin tests of whom 382 were subsequently vaccinated.

(e) Poliomyelitis Vaccination.

During the year the scheme introduced in the previous year was extended to cover all children born in the years 1943 to 1958 inclusive, and expectant mothers.

The number of children registered for vaccination since the inception of the scheme increased during the year from 8,798 to 17,878 ; the number of children fully vaccinated during the year was 11,560, bringing the total of such children up to 14,453. In addition 1,723 had received the first injection, and at the end of the year were awaiting the second.

The expenditure in Wolverhampton on vaccination and immunisation per 1,000 population for 1957-58 was £5 2s.0d. The average expenditure for the 83 County Boroughs of England and Wales was £13 15s. 0d.

6. Ambulance Service.

The service has a staff of 36 and a fleet of 17 vehicles consisting of 14 ambulances, 2 sitting case cars and a mortuary van. The number of calls 45,467 was 11.4 per cent more than in the previous year and the total mileage showed an increase of 6.5 per cent. Of the total calls 2.6 per cent were alike to accidents and to emergencies.

The average cost of the ambulance service per 1,000 population for the 83 County Boroughs of England and Wales in the year 1957-58 was £209 13s. 0d.; in Wolverhampton it was £202 15s. 0d.

7. Prevention of Illness, Care and After-care.

(a) Tuberculosis.

Chest physicians are employed jointly by the Regional Hospital Board and the Town Council; the latter pay a portion of their salaries equivalent to 3/11ths of the salary of one chest physician. In pursuance of their duties relating to the prevention of tuberculosis, the chest physicians are concerned with the welfare of contacts, and arrangements exist whereby they can administer B.C.G. vaccine. In addition, many children are vaccinated by the pædiatrician.

The personal and social problems of tuberculous patients may have been factors contributing to the development of the disease; they may also arise as a result of the illness and may retard recovery. The After-care Officer operates with the staff of the chest clinic and the tuberculosis visitors with the aim of restoring the patients to health and a useful life as soon as possible.

With modern treatment the illness generally has been considerably shortened resulting in a reduced demand for material help, but in an increasing demand for help in finding suitable employment when fit again for work. Of the 114 patients referred as being fit for work in 1957 only 10 have so far not been placed, and after 12 months employment 83 of the 114 who have been placed were still well and at work. Although the placing of disabled people is becoming more difficult owing to the growth of unemployment in the area, only 28 patients out of a total of 95 referred during 1958 had not been placed by the end of the year; of the 67 placed 33 had returned to former employers, 18 found work for themselves and 16 were placed by the Disablement Resettlement Officer directly in employment.

During the year the After-care Officer dealt with 322 cases; financial help was obtained for 89 cases, clothing grants for 41, bedding and bedding grants for 18 and free milk for 116.

A further generous donation of £105 from the "Joe Birch Memorial Cup" Fund was paid into the Wolverhampton Voluntary Fund for Tuberculosis, and this money has been used to supplement help given to patients from statutory sources. Messrs. James Beattie Ltd. again gave toys at Christmas time which were distributed amongst the children of needy families.

The Occupational Therapy Class continues to function and is a great help to patients who, though discharged from a sanatorium, are not yet fit for work.

The report of the Chest Physician, Dr. J. Aspin, on pulmonary tuberculosis in Wolverhampton and the adjoining Staffordshire areas during 1958 follows:—

The chest diagnostic services have again been freely used by general practitioners in the area, a hundred patients per week being referred for radiological exclusion of pulmonary tuberculosis, and 45 new cases per week being seen clinically as Chest (Medical) Out-patients. This work has been done at four different centres. 5,312 exclusion cases were X-rayed at the Mass Radiography Unit, New Cross Hospital, during the year (5,224 in 1957); 524 and 739 new investigation cases were seen at the Royal Hospital and at New Cross Hospital respectively, and another 1,021 at Bell Street, making a total of 7,596 new patients in the year. Although this diagnostic system works well in its rather complex way, it would be much simpler if the entire Chest Service including the miniature radiography unit could be sited inside one of the main hospitals of the Group.

New cases of pulmonary tuberculosis discovered during the year totalled 222, (260, 245, 272 and 252 in the years 1954-57 respectively). At last (and long after the similar decline in less industrialised areas) fewer new cases are developing among young adults. Of these 222 cases, 74 (33%) came from the X-ray Exclusion Service, and in all 134 (61%) had some connection with the Mass Radiography Units in the first instance; 24 (11%) were first seen at the Chest (Medical) Out-patient Clinics, and 53 (24%) were referred to the Chest Service from hospital by other con-

sultants. Staff and patients might more swiftly be guarded against infection if all in-patients and new out-patients had their chests X-rayed upon arrival at hospital.

Treatment of tuberculosis cases has, as before, been carried out by the Group's chest physicians working at Parkfields Hospital (55 beds) and through the kindness of the Dudley and Stourbridge Group at the Prestwood Group of Sanatoria, another 100 beds. Although there is now no appreciable waiting list for admission, the need for these beds is still apparent and is likely to remain so.

Death from tuberculosis is now fortunately relatively rare, so that follow-up work with recovering cases at the Chest Clinic, Bell Street has progressively increased in volume. This clinic has continued to act as the tuberculosis control centre, and through the Local Authorities' Health Visitors and Welfare Officers it has dealt with preventive measures such as contact review and B.C.G. vaccination, and also rehousing and rehabilitation. The happy arrangement whereby Dr. Everley Jones supervises tuberculosis contacts under the age of five years still continues.

Steadily increasing numbers of cases of bronchitis, bronchiectasis, asthma and pneumoconiosis have been seen at the diagnostic clinics and followed up where necessary at the Chest Clinic, Bell Street.

(b) Other Illness.

The work with non-tuberculous patients still consists chiefly of arranging for admission to convalescent homes when this cannot be arranged through other channels; the patients are asked to contribute towards the cost according to their means. The following details refer to cases dealt with during the year :

Applications received			74
Sent to convalescent homes	Adults	55	
	Children	—	
		—	55
Referred to Patient's Aid Association			1
Too ill to go			5
No suitable vacancy found			4
Withdrew application			9
			— 74

A supply of equipment is available for lending to patients nursed at home, who are required to pay a deposit which is refunded on the return of the equipment in good condition. During the year, equipment was provided for 562 patients nursed at home.

The average cost of prevention, care and after-care of tuberculosis per 1,000 population for the 83 County Boroughs of England and Wales in the year 1957-58 was £25 10s. 0d.; in Wolverhampton it was £16 2s. 0d.

The average cost of the services for other illness per 1,000 population in the 83 County Boroughs in England and Wales was £19 0s. 0d.; in Wolverhampton it was £5 12s. 0d.

8. Domestic Help.

At the end of the year there were 13 whole time and 51 half time workers, and in addition 2 part time workers employed for two hours daily; this staff represents an increase of 2 whole time and 2 half time workers in a year. The 792 cases assisted by the home helps during the year comprised :—

Maternity (including expectant mothers)	143
Tuberculosis	3
Chronic Sick (including aged and infirm)	461
Problem families	1
Others	184

The organiser investigates the conditions in every case before domestic help is sent and subsequently she pays weekly visits; during the year she paid 2,591 visits. In January 309 patients classed as "chronic sick" were receiving regular weekly help and the number had increased to 334 by December. Most of them are enabled to continue living in their own homes by the domestic help which they receive. They are encouraged to undertake some of the lighter duties themselves, although this increases the burden on the individual home help who is left with the heaviest and dirtiest work in every household where often there are no labour-saving devices or even household equipment.

During the last quarter of the year a home help was sent to a problem family for an indefinite period.

In the financial year 1957—1958, the last year for which collective figures are available, the domestic help service in Wolverhampton cost £76 18s. 0d. per thousand population; the average for the 83 County Boroughs in England and Wales was £130 18s. 0d.

9. Health Education.

An annual contribution of £80 is made to the Central Council for Health Education and one of five guineas to the National Association for the Prevention of Tuberculosis. Poster boards in various parts of the town are used for the display of topics supplied by the Central Council for Health Education. Pamphlets prepared by the Central Council on a variety of subjects including measles, influenza and common colds are distributed in the clinics. The parents of all school leavers are advised of the desirability of accepting B.C.G. vaccination when it is necessary.

Health education is one of the chief duties of health visitors who constantly advise mothers on the management, feeding and clothing of children, the dangers of accidents, and the importance of protecting children against smallpox, diphtheria, whooping cough and poliomyelitis.

The dangers of food poisoning and the importance of food storage and food preparation continue to be stressed in talks given by members of the staff to various organisations in the town.

10. Mental Health.

(a) Administration.

The Health (Mental Health) Sub-Committee meets monthly and delegates no duties to voluntary associations. Statistical information is placed before the Committee, reports on individual mental defectives are dealt with but no individual reports are received on cases of mental illness.

The staff of the Health Department includes one female and two male mental health officers who are all duly authorised to take initial proceedings for providing care and treatment for persons

suffering from mental illness. The female officer also deals with the administration of the Mental Deficiency Acts, and the male officers, one a former relieving officer and the other a state registered nurse and state registered mental nurse, undertake the after-care of patients who have been mentally ill. The Special Training Centre has a staff of one Supervisor, five assistants, two domestic assistants and a caretaker. A panel of general practitioners is used for domiciliary visits and for the completion of medical certificates for petitions under the Mental Deficiency Acts and for renewal orders.

Co-operation with the hospital authorities has continued. The central allocation by the Regional Hospital Board of institutional vacancies for mental defectives works smoothly and during the year 2 males and 5 females under 16 years of age, and 4 males and 2 females over 16 years of age were admitted to permanent vacancies ; temporary vacancies were found for 7 males and 8 females under 16 years of age, and for 3 males and 6 females over 16 years of age. Consultant psychiatrists from St. George's Hospital, Stafford, attend twice weekly the out-patient Psychiatric Clinic at New Cross Hospital where they are responsible also for the medical supervision of patients admitted on statutory observation orders. The consultants call upon the service of the mental health officers at out-patient clinics and readily make themselves available to advise these officers. The regular attendance of consultants at New Cross Hospital also has made it possible to give more active out-patient treatment to people who otherwise might have been admitted to St. George's Hospital, Stafford, which is too far away for many of them to visit as out-patients ; this arrangement has to some extent relieved the severe shortage of mental hospital beds in the area. Fortnightly discussions are held at St. George's Hospital between the hospital staff and mental health officers of local authorities using the hospital.

(b) Work undertaken in the Community.

(i) Mental Treatment.

Under Section 28 of the National Health Service Act mental health officers either interviewed in the Health Department or visited in their homes 452 people who had been referred to them

by general practitioners or by other departments, or who came direct to the mental health officers seeking help and advice. These officers also paid 126 visits to former mental hospital patients and 11 were being visited regularly at the end of the year.

During the year 118 Wolverhampton residents (54 males and 64 females) were admitted for observation to New Cross Hospital, a decline of 10 patients on 1957 ; of these, 26 were discharged at the expiration of the statutory three days, 58 were detained for a further 14 days and subsequently discharged, while 15 became voluntary patients, 3 temporary patients, 14 were certified as being of unsound mind and admitted to a mental hospital and 2 died. A further 3 persons (all females) were admitted to New Cross Hospital on a Justice's Order (Section 21, Lunacy Act 1890) and two were later certified as of unsound mind and transferred to a mental hospital and one discharged. Eight persons (3 males and 5 females) were admitted for observation to St. George's Hospital, Stafford, and of these 7 accepted voluntary treatment and one was discharged. In addition 15 persons (3 males and 12 females) were certified in their own homes and received into a mental hospital. The total number of certified patients received into mental hospitals was 29 (9 males and 20 females).

During the year 40 certified patients (14 males and 26 females) were discharged from mental hospitals. Of the 14 male patients, 4 were discharged to voluntary status, 7 were discharged relieved and 3 died ; while of the 26 female patients 6 were discharged to voluntary status, 11 were discharged relieved, one was discharged recovered and 9 died.

Voluntary admissions were 9% higher than in 1957 ; 212 persons (72 males and 140 females) submitted themselves for voluntary treatment and of these, 149 were discharged (97 relieved, 35 recovered, 16 not improved and one died). It is interesting to note that of the 212 persons admitted, 6 were re-admitted during the year and 39 had received previous treatment. The total number of voluntary patients discharged during the year was 180 (60 males and 120 females) while 130 were still undergoing treatment. At the end of the year 475 Wolverhampton residents were known to be receiving treatment in mental hospitals.

As the Wolverhampton hospitals cater for an area extending far beyond the County Borough limits, duly authorised officers are required to institute proceedings under the Lunacy Act for persons not resident in the County Borough who may be patients within the hospitals or who have been brought there for emergency reasons, for instance following attempted suicide. These patients are not included in the figures already given for the County Borough and comprised 19 persons who were admitted for observation to New Cross Hospital of whom 8 were detained on 14-day detention orders and later discharged, 2 who were certified of unsound mind and transferred to a mental hospital, 4 became voluntary patients and 5 were discharged at the end of the statutory 3 days.

Age group analysis of the 118 patients admitted to observation wards and the 212 voluntary patients are given in the two following tables :—

**Age Group analysis of Patients admitted to
Observation Wards.**

Sex	16-19 yrs.	20-29 yrs.	30-39 yrs.	40-49 yrs.	50-59 yrs.	60-69 yrs.	70-79 yrs.	Over 80 yrs.	All Ages.
Male	2	6	10	10	5	8	11	2	54
Female	2	8	15	13	13	6	4	3	64
Total	4	14	25	23	18	14	15	5	118

Age Group Analysis of Voluntary Patients.

Sex	Under 16	16-19 yrs.	20-29 yrs.	30-39 yrs.	40-49 yrs.	50-59 yrs.	60-69 yrs.	70-79 yrs.	Over 80 yrs.	All Ages
Male	1	2	8	23	20	10	4	4	—	72
Female	—	8	17	26	30	35	16	7	1	140
Total	1	10	25	49	50	45	20	11	1	212

(ii) Mental Deficiency.

Under the Mental Deficiency Acts 40 mental defectives were notified during the year to the Local Health Authority. Seven (3 males and 4 females) under 16 years of age and 12 (6 males and 6 females) over 16 years of age were placed under statutory supervision ; the 7 under 16 years of age were admitted to the Special Training Centre and the 12 over the age of 16 years were Special School leavers, who it is hoped will be self-supporting. Seven cases were admitted to hospital comprising 2 males and one female under 16 years of age and one male and two females over 16 years of age, and one female over 16 years of age who was referred by the Court. Fourteen (6 males and 5 females under 16 years of age and one male and two females over 16 years of age) were placed under voluntary supervision.

During the year 21 Orders under the Mental Deficiency Acts were discharged, 5 cases died, 13 were admitted to institutions and the notification in respect of one case previously notified by the Local Education Authority for admission to the Special Training Centre was rescinded and the child is now attending the E.S.N. residential school ; one child was transferred from the Special Training Centre to Beckminster Special School and subsequently re-admitted to the Special Training Centre ; 20 defectives, including 14 from the Special Training Centre, were admitted to short-stay accommodation under the provision of Ministry of Health Circular 5/52.

The number of ascertained mental defectives known to the Health Department at the end of the year was 720 comprising the following :—

	Under 16		Over 16		Total.
	M.	F.	M.	F.	
(i) Under Statutory Supervision	24	17	118	164	323
(ii) Under Guardianship	—	—	7	6	13
(iii) In "Places of Safety"	—	—	—	1	1
(iv) In Hospitals	8	7	111	84	210
(v) Under Voluntary Supervision	15	24	71	63	173
Total	47	48	307	318	720

The number of ascertained mentally defective persons on the register at 31st December, 1958 was equivalent to 0.49 per cent of the population.

The Special Training Centre continues to satisfy a great need in the community care of the mentally defective. There were 98 on the register at the end of the year (an increase of nine) including 6 cases from outside the borough. Use is made when necessary of the School Health services including the minor ailment clinic and the dental clinic, and a school nurse makes regular visits to the centre.

Those attending are divided into 7 groups consisting of senior girls, senior boys, junior boys and girls, 2 classes of infants with 14 in each class, a nursery group of 8 and a spastic group including 4 chair cases. The school syllabus includes habit, speech and physical training, dancing, rhythmic work, music and art, sense training, and occupations of many kinds. Progressively planned handicrafts include basketry, rug making, needlework and embroidery.

Eleven children suffering from epilepsy and 11 spastics, some of whom are chair cases and unable to walk, attend the Special Training Centre. Specially designed parallel bars have been installed to help with their walking. One of these children attends the Ward Street Orthopædic Clinic weekly for instruction on special exercises to be carried out daily at the Centre.

Most parents are co-operative and take a real interest in the children's progress. During the year 14 children have stayed at short stay Homes for two or three weeks; senior children had a day's outing to Evesham and all children either too young or incapacitated had a party at the Centre. All children also enjoyed a Christmas party.

Two students from the N.A.M.H. diploma course did their practical training at the Centre. There have been many visitors to the Centre during the year including the Mayor and Mayoress, a member of parliament, a child welfare officer, a hospital admin-

istrator, a medical social worker from the U.S.A. and parties of students from the Wolverhampton Technical College, Dudley Training College, Wolverhampton High School for girls and student nurses.

The average cost of occupation centres per 1,000 population for the 83 County Boroughs of England and Wales in the year 1957-58 was £46 5s. 0d.; in Wolverhampton it was £42 2s. 0d.

The average cost of other mental health services for the 83 County Boroughs was £28 1s. 0d.; in Wolverhampton it was £6 4s. 0d.

11. Care of the Aged and Infirm.

The National Assistance Act provides for persons who, being seriously ill or being aged, infirm or incapacitated are living in insanitary conditions and are unable to obtain proper care and attention. Action can be taken by the local authority if the medical officer of health certifies that it is necessary to remove such persons either in their own interests or for preventing injury or serious nuisance to others.

During the year 2 cases (a man of 87 and a woman of over 70) were brought to the notice of the Health Department. The man voluntarily entered accommodation provided under part 3 of the National Assistance Act and the woman, who appeared to be well nourished and, therefore, could not be considered for action under the Act, died at home a few weeks later.

12. Epileptics.

Only 17 epileptics have registered under the Council's scheme under the National Assistance Act and they represent probably no more than five per cent of the epileptics in Wolverhampton. Seven epileptic children of school age are in special schools and one boy is awaiting admission to a special school; several other epileptic children who do not need special education attend ordinary schools. Among mental defectives who are not in institutions 41 children are known to be epileptic and 10 of these attend the Special Training Centre.

13. Spastics.

There is little known about the number of spastics in Wolverhampton and only 9 adults have registered under the Council's scheme. Spastics of school age include 7 attending a special school as day pupils and 3 at special boarding schools, one at a hospital school and 4 awaiting admission to a special school. In addition a number of mild cases of spasticity presenting no special educational problem attend ordinary schools in the town. Some mental defectives have the additional disability of being spastic and in the class of mentally defective spastic children at the Special Training Centre there are now 11 children of whom 4 are chair cases; 3 of the spastics are also epileptics and are included in the figure for epileptics.

14. Blind Persons.

The number of cases registered during the year was 46 blind and 5 partially sighted and the number of blind persons on the register at the end of the year was 341. Their age and sex distribution was :—

Age Group.	Males.	Females.	Total.
Age 1	—	1	1
Age 4	1	1	2
5—10	2	2	4
11—15	—	2	2
16—20	5	1	6
21—29	6	1	7
30—39	11	10	21
40—49	18	14	32
50—59	18	14	32
60—64	13	13	26
65—69	14	22	36
70—79	38	50	88
80—84	15	27	42
85—89	11	20	31
90 and over	7	4	11
	159	182	341

The table shows that 61 per cent of the registered blind are aged 65 years and over, and that 50 per cent are aged 70 years or over.

The following table shows the number of cases registered during the year, the number of these in which treatment was recommended and the number who received it :—

Cases Registered.	Cause of Disability.			
	Cataract.	Glaucoma.	Retrolental Fibroplasia.	Others.
Total	15	7	—	29
Recommended for Treatment	10	4	—	9
Received Treatment	6	4	—	7

15. Medical Examinations.

Medical examinations were carried out by the medical staff of the Health Department for the Transport, Fire Service and other Corporation departments. The total number of examinations during 1958 was 587 comprising 464 males and 123 females, including 427 (387 males and 40 females) for the Transport Department, and 19 males for the Fire Service. A charge is made to the Transport Department and Fire Service for each examination performed, but no charge is made to other Corporation Departments.

SECTION III.

INFECTIOUS AND OTHER DISEASES.

1. Incidence.

The corrected notifications per 1,000 population of certain infectious diseases in Wolverhampton during 1958 are appended :—

Disease.	Rate per 1,000 population.
Scarlet Fever	0.98
Whooping Cough	0.30
Acute Poliomyelitis Paralytic	0.01
Measles	5.47
Dysentery	0.05
Pneumonia	0.54
Paratyphoid	0.01
Erysipelas	0.09
Food Poisoning	0.03
Puerperal Pyrexia	2.73 per 1,000 total births.
Ophthalmia neonatorum	0.83 per 1,000 live births.

There were no cases of diphtheria, smallpox, meningococcal infection or typhoid fever.

2. Scarlet Fever.

There were 145 cases, three of which were admitted to hospital. There were no deaths.

3. Whooping Cough.

There were 44 notifications; no cases were admitted to hospital. A mongol child of 8 months died from broncho-pneumonia due to whooping cough.

4. Poliomyelitis.

The only case was of polioencephalitis of sudden onset which was notified by the hospital after death.

5. Measles.

Notifications for the year numbered 809 compared with 2,218 during 1957 and 248 in 1956. Only one case was nursed in hospital. One death from measles with encephalitis occurred in a baby of 5 months.

6. Dysentery.

Notifications were 7; 2 cases were admitted to hospital and no deaths occurred.

7. Pneumonia.

There were 80 cases of pneumonia notified and there were 109 deaths but only six of these were amongst the notified cases ; 12 notified cases were nursed in hospital.

8. Paratyphoid.

There was one case admitted to hospital as a salmonella infection and then revised to Paratyphoid B.

9. Food Poisoning.

The number of cases notified was 5 ; only two were nursed in hospital and there were no deaths.

10. Puerperal Pyrexia.

The number of cases notified was 68 ; of these, 7 were patients confined at home and 61 were patients confined in hospital.

11. Ophthalmia Neonatorum.

There were 2 cases ; one was born in a nursing home and one at home. There was no apparent impairment of vision.

12. Miscellaneous.

Among the miscellaneous cases notified were 13 cases of erysipelas.

13. Venereal Diseases.

The treatment of these diseases is the responsibility of the Regional Hospital Board and facilities are provided at the Royal Hospital.

Syphilis. During the year 54 cases (31 males and 23 females) were dealt with for the first time ; 5 of them were suffering from primary or secondary syphilis or latent syphilis in the first year of infection. Of these 54 cases, 41 were Wolverhampton residents.

Gonorrhœa. There were 323 cases (277 males and 46 females) dealt with for the first time, and 255 of these were Wolverhampton residents. In addition, 2 Wolverhampton residents suffering from gonorrhœa were dealt with for the first time at Dudley.

Other Conditions. The number of cases dealt with for the first time was 623 (423 males and 200 females), but 359 of them (227 males and 132 females) did not require treatment. In addition 7 Wolverhampton residents suffering from one of these other conditions were dealt with for the first time at Dudley.

14. Tuberculosis.

The local health authority is responsible for measures designed to prevent tuberculosis, and they include advising the Housing Committee on the desirability of providing housing accommodation for families containing a tuberculous member, persuading all contacts of known cases to report for examination, the routine patch testing of all infants attending welfare centres and all school entrants, and B.C.G. vaccination of school leavers of whom 1,381 were vaccinated during the year.

X-ray facilities readily available to general practitioners have continued to be valuable in ascertaining cases.

Since 1920 there have been continuous declines in both pulmonary and non-pulmonary death rates in Wolverhampton. In 1951 the death rate from all forms of tuberculosis had declined to 51 per 100,000, in 1955 it was 17, in 1956 it was 12, in 1957 it was 11, and in 1958 (with 15 deaths, 11 pulmonary and 4 non-pulmonary) it was 10 per 100,000 population.

Notification.

Year	1954	1955	1956	1957	1958
Pulmonary					
Male	86	74	97	84	91
Female	64	51	69	52	41
Non-Pulmonary					
Male	10	7	10	4	7
Female	12	10	8	10	2
Total	172	142	184	150	141

The cases remaining on the register at the end of 1958 were classified as follows :—

Pulmonary.		Non-Pulmonary.	
Male	714	Male	56
Female	484	Female	58
	<hr/> 1,198 <hr/>		<hr/> 114 <hr/>

Deaths.

The deaths from tuberculosis in 1958 and the preceding 4 years are given below :—

Year	1954	1955	1956	1957	1958
Pulmonary					
Male	28	19	14	13	8
Female	12	3	4	1	3
Non-Pulmonary					
Male	3	3	1	1	1
Female	—	2	—	2	3
Total	43	27	19	17	15

Details of notifications and deaths are given below :—

Age	NEW CASES				DEATHS			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	Male	Female	Male	Female	Male	Female	Male	Female
0— 1	—	—	—	—	—	—	—	—
1— 4	1	4	—	—	—	—	—	—
5—14	6	4	2	—	—	—	—	—
15—24	23	13	1	—	—	—	—	—
25—44	23	16	3	2	1	1	1	2
45—64	34	4	1	—	5	1	—	1
65—74	3	—	—	—	—	1	—	—
75 & over	1	—	—	—	2	—	—	—
Totals	91	41	7	2	8	3	1	3

15. Cancer.

The number of deaths attributed to cancer and allied conditions was 293. The age and sex distribution of the cases was :—

Age.	Male.	Female.	Total.
0— 4	1	—	1
5—14	1	—	1
15—24	—	—	—
24—44	8	6	14
45—64	73	47	120
65—74	41	40	81
75 and over	37	39	76
	161	132	293

The sites of the disease were :—

	Male.	Female.	Total.
Mouth	1	—	1
Oesophagus	3	6	9
Stomach	21	16	37
Large Intestine	18	16	34
Rectum	9	12	21
Gall bladder	—	1	1
Liver (secondary and unspecified)	4	—	4
Pancreas	4	1	5
Peritoneum	—	1	1
Maxillary sinus	1	—	1
Lung and bronchus	65	3	68
Breast	—	42	42
Uterus	—	8	8
Ovary	—	4	4
Prostate	10	—	10
Kidney	3	2	5
Bladder	4	2	6
Lips	1	—	1
Brain	6	1	7
Thyroid gland	—	2	2
Other endocrine glands	1	1	2
Bones of skull and face	1	1	2
Other sites	2	8	10
Reticulosarcoma	1	—	1
Hodgkin's disease	3	1	4
Reticulosis	—	1	1
Multiple myeloma	1	—	1
Leukæmia	2	3	5
	<hr/>	<hr/>	<hr/>
Totals	161	132	293
	<hr/>	<hr/>	<hr/>

REPORT OF THE CHIEF PUBLIC HEALTH INSPECTOR
F. Binns Hartley, M.A.P.H.I., M.R.S.H.

The main feature of the year's work was again the very satisfactory progress made towards the fulfilment of the Council's slum clearance programme.

The programme provided for the clearance of 2,500 houses during the five-year period commencing January, 1955 and it is pleasing to record that a total of 2,620 houses was represented during the period June, 1954 to December, 1958 ; in effect, the Council's programme has been substantially completed in less than five years.

Many local authorities have not made such satisfactory progress. The target for England and Wales is the demolition of 375,484 houses in the five-year period, but statistics indicate that this objective will not be achieved ; in fact, at the present rate of progress, the five year programme will take eight to nine years to complete.

While the activity in this sphere was gratifying, it nevertheless contributed to inadequate action in other fields. Once again, there was not a full complement of inspectors, and certain aspects of the work, such as food hygiene and atmospheric pollution, could not receive sufficient attention. I would again emphasise that whilst satisfactory housing is essential, so are clean food and clean air.

By the end of the year, the Rent Act, 1957 had been in force for a sufficient period to enable its effect to be assessed. The applications received for certificates were far less in number than originally anticipated, and concerned only a very small proportion of those controlled houses where items of disrepair made the increased rents unjustified. A high percentage of the tenants of houses included in the slum clearance programme were served with notices of increase ; in many cases, these tenants served form " G " upon the landlords but failed to take any further action even though the items of disrepair remained unremedied. Tenants in general, and the elderly in particular, are bewildered by the com-

plicated procedure and the multiplicity of forms, but above all they fear that eviction will result if they proceed with applications for certificates of disrepair. It is regrettable that such an involved procedure was found necessary ; from an administrative point of view, the Act created considerable work despite the relatively low number of applications.

The number of qualified inspectors employed has remained fairly constant in recent years, but below establishment. During the year under review, two of the articled pupil public health inspectors were successful in obtaining the certificate of the Education Board at the first attempt, but the welcomed increase in qualified staff brought about by their promotion was offset by the loss of two inspectors to other authorities. It is of interest to record that during the year 330 candidates presented themselves for examination in England and Wales, and 198 were successful. Although these figures were higher than those for the previous year, it would appear that the majority of the newly qualified inspectors continued to be absorbed by the authorities responsible for their training. Even with this increased recruitment it remains difficult for authorities of county borough status to obtain inspectors, and it may well be that some years will elapse before full establishments can be assured.

All members of the staff have carried out their duties with enthusiasm and efficiency and the contents of this report are a tribute to their efforts.

SECTION IV.

SANITARY CIRCUMSTANCES OF THE AREA.

1. Water Supplies.

Routine samples were taken from the town's main supplies ; 30 were submitted for chemical analysis and 30 for bacteriological examination. The reports received indicated that the supplies were satisfactory.

2. Swimming Bath Water.

Routine samples were taken from the four public baths ; 20 were submitted for chemical analysis and 20 for bacteriological examination, and all proved to be satisfactory. The standards imposed are those obtaining for drinking water.

The use of "break point" chlorination was continued, and the maintenance of a satisfactory bacteriological standard indicated its efficiency.

3. Offensive Trades.

Offensive trades operated upon four premises, the trades of fat melter, bone boiler, blood boiler and drier, and gut scraper being carried on.

4. Hairdressers' and Barbers' Premises.

Twelve applications were received and approved under Section 87 of the Wolverhampton Corporation Act, 1936 for the registration of hairdressers and their premises ; 159 persons and their premises are now on the register and 161 inspections were made.

5. Pharmacy and Poisons Act, 1933.

Seven applications were received for entry in the local authority's list of persons entitled to sell poisons under Part II of the above-mentioned Act and the Regulations made thereunder ; these applications were granted. A total of 148 persons and firms operating from 194 premises is now on the register.

Twenty-three routine visits were paid to the premises listed for the purpose of ensuring compliance with the Regulations with regard to the storage and sale of Part II poisons.

6. Sanitation.

A total of 1,655 complaints was received and investigated.

The following table summarises the inspections made and the notices served and complied.

	Inspections made	NOTICES.			
		Served		Complied with	
		Informal	Statutory	Informal	Statutory
Dwelling houses— Public Health Act ...	1,555	873	329	446	380
Drainage ...	564	76	145	76	145
Miscellaneous ...	3,089	—	—	—	—
Totals ...	5,208	949	474	522	525

Total re-visits to all premises	3,485
Total improvements recorded	1,800

7. Infectious Diseases.

One hundred and seventy-five visits were made in connection with cases of infectious diseases notified to the Medical Officer of Health. Housing conditions, contacts and their employment, milk supplies and, in appropriate cases, the means of isolation formed the subjects of the enquiries.

8. Keeping of Animals.

Forty-one inspections of premises were made in connection with the keeping of animals.

9. Disinfection and Disinfestation.

The following table summarises the action taken :—

Disinfection.

No. of rooms fumigated	...	...	...	95
No. of rooms sprayed	...	...	...	24
No. of library books fumigated	...	...	...	87

Articles sprayed :—

Personal clothing	...	...	...	...	67
Bedding	...	...	...	...	17
Blankets	...	...	...	...	9
Sheets	...	...	...	...	10

Disinfestation.

No. of rooms fumigated	...	...	...	65
No. of rooms sprayed	...	...	...	145

10. Smoke Abatement.

Certain sections of the Clean Air Act, 1956 had been in force from the 31st December of that year. The remainder became operative on the 1st June, 1958 and included the provisions relating to :—

- (a) Prohibition of dark smoke from chimneys.
- (b) Grit and dust from furnaces.
- (c) Abatement of smoke nuisances.
- (d) Railway engines.
- (e) Vessels.

At the same time, the Alkali, &c., Works Order, 1958 came into operation and extended the lists of noxious or offensive gases and works mentioned in the Alkali, &c., Works Regulation Act, 1906. As a result, certain premises and processes, previously not affected, were now subject to registration under the Act, and became the responsibility of the Alkali Works Inspector.

Control of Smoke Emissions. From 31st January to 31st May, 1958, Section 101 to 106 (inclusive) of the Public Health Act, 1936 and the Byelaw made in pursuance of Section 104 (14) were still in force for dealing with smoke nuisances. The Byelaw standard regulated the emission of black smoke to three minutes in any period of thirty minutes, and an emission of such smoke for more than three minutes was a statutory nuisance and a smoke nuisance. Thirty-three smoke observations were made ; only one excessive emission of black smoke was recorded, this being from a boiler adapted to consume waste wood as a fuel. The amount of smoke emitted was reduced by attention to firing methods.

During the remainder of the year, the standards to be observed were detailed in the Clean Air Act, 1956 and Regulations made thereunder. The amount of smoke permitted was now governed by :—

- (i) the number of furnaces served by a chimney,
and
- (ii) soot blowing operations.

Separate standards applied in respect of “dark ” and “black” smoke whereas previously the Byelaw referred only to black smoke. The new standards may be summarised as follows :—

- (a) A maximum aggregate emission of dark smoke varying from 10 to 41 minutes in any period of 8 hours, according to the number of furnaces and to soot blowing operations.
- (b) A maximum of 4 minutes continuous emission of dark smoke ; this standard does not apply when the emission is caused by soot blowing.
- (c) A maximum of 2 minutes aggregate emission of black smoke during any period of thirty minutes.

It should be noted that the allowances detailed in (b) and (c) are not additional to the overall permitted period in (a).

In addition to the foregoing allowances, a defence is provided in respect of emissions which are :—

- (a) solely due to the lighting up of a furnace which is cold, all practicable steps having been taken to prevent or minimise the emission ; or
- (b) some unforeseeable failure of a furnace or of apparatus used in connection with a furnace ; or
- (c) the enforced use of an unsuitable fuel ; or
- (d) due to a combination of two or more of the causes specified in paragraphs (a) to (c).

Forty-two smoke observations were carried out under the provisions of the new Act, and in many instances were over longer periods than previously necessary. Series of observations were carried out on two installations and occasional infringements occurred. As a result, modifications to the furnaces of one installation were to be effected ; in the other instance, the boiler responsible was taken out of commission and no excessive smoke was subsequently observed. With regard to the observations generally, results indicated that there would have been instances of emissions in excess of those permitted over eight hour periods. In those cases the premises were visited and the occupiers informed ; as a result, several furnaces were modified and alterations to others were under consideration. Modifications included conversions to oil and automatic firing, and alterations to grates in order to burn smokeless fuel.

Smoke Control Areas. Due to the shortage of staff, it was not practicable to take any further action in connection with the establishment of smoke control areas.

Notification of Intention to Install Furnaces. Notifications were received in respect of 7 proposed installations in accordance with the provisions of Section 3 (3).

Application for Prior Approval. One application was received under the provisions of Section 3 (2) and the proposed automatically fired boiler installation was approved.

Height of Chimneys. Five proposals to erect chimneys at industrial premises were received and approved. In each instance, the chimney was for use with a small installation.

11. Measurement of Atmospheric Pollution.

Investigations were continued by means of one deposit gauge, four lead peroxide cylinders, one volumetric sulphur dioxide measuring apparatus and one smoke filter.

The deposit in the Cleveland Road area was at the rate of 233.88 tons per square mile.

12. Factories Acts, 1937 and 1948.

In addition to works of building construction, etc., it is estimated that there are 944 factories, 872 having mechanical power and 72 having no mechanical power.

One hundred and fifty-one inspections were carried out for the purpose of enforcing those parts of the Factories Acts and Regulations for which the local authority is responsible. As a result of these inspections, 31 notices were served ; of the 45 cases in which defects were found, 28 were of insufficient, unsuitable or defective sanitary accommodation. Cases in which defects were remedied amounted to 41, of which 25 referred to sanitary accommodation.

Details of inspections made, cases of defects found and remedied, etc., are set out in the following tables :—

INSPECTION OF FACTORIES.

Premises	No. on Register	Number of		
		Inspections	Written Notices	Prosecutions
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by local authorities	72	—	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the local authority	872	151	31	—
(iii) Other premises in which Section 7 is enforced by the local authority (excluding outworkers premises)	66	—	—	—
Totals	1,010	151	31	—

Cases in which defects were found.

Particulars	No. of cases in which defects were found				No. of cases in which prosecutions instituted
	Found	Remedied	Referred		
			To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S.1.) ...	10	11	—	4	—
Overcrowding (S.2.) ...	—	—	—	—	—
Unreasonable temperature (S.3.) ...	—	—	—	—	—
Inadequate ventilation (S.4.) ...	—	—	—	—	—
Ineffective drainage of floors (S.6.) ...	—	—	—	—	—
Sanitary conveniences (S.7.)					
(a) Insufficient ...	2	3	—	2	—
(b) Unsuitable or defective	26	22	—	2	—
(c) Not separate for sexes	—	—	—	—	—
Other offences against the Act (not including offences relating to outwork)	7	5	—	—	—
Totals ...	45	41	—	8	—

13. Noise Nuisances.

Section 107 of the Wolverhampton Corporation Act, 1936 makes provision for action in respect of excessive, unreasonable or unnecessary noise where this is injurious or dangerous to health, but in proceedings in respect of noise occasioned in the course of a trade, business or occupation it is a good defence that the best practicable means of preventing or mitigating it, having regard to the cost, have been adopted; attempts are therefore made to achieve satisfactory results by co-operation.

The majority of the complaints received referred to industrial premises. Investigations of certain complaints showed that the operations were inevitably accompanied by noise which could not be prevented, and when this noise resulted from work at night efforts were made to have the operations concerned carried out during normal day-time working hours. In the remaining instances, the complaints were brought to the notice of the persons or firms concerned and efforts were made to reduce the noise to a minimum.

14. Rag Flock and Other Filling Materials Act, 1951.

An additional upholsterers' factory was registered during the early part of the year, but the premises were vacated shortly afterwards and the business transferred to other premises, which were subsequently registered. At the end of the year, the type of work specified in the Act was carried on at 7 premises registered for this purpose.

Seven samples, including curled fibre, cotton felt, Algerian fibre, coir fibre and rag flock, were taken for analysis and all were found to be satisfactory.

15. Canal Boats.

Thirty-seven inspections were carried out and 11 infringements of the Public Health Act and the Canal Boat Regulations were found. Eight notices were served, 4 of which were complied with ; in addition, 8 of the notices outstanding at the end of 1957 were complied with.

The population of the boats inspected amounted to 86 persons, of whom 61 were adults and 25 were children.

16. Rodent Control.

Details of the activity are given in the following report, which was submitted to the Minister of Agriculture, Fisheries and Food. No new developments in poisoning technique were recommended by the Minister ; warfarin was again used for the majority of the treatments and continued to be effective.

PREVENTION OF DAMAGE BY PESTS ACT, 1949.

	Type of Property				
	Non-Agricultural				(5) Agri- cultural
	(1) Local Authority	(2) Dwelling Houses (incl. Coun- cil Houses)	(3) All other (including Business Premises)	(4) Total of Cols. (1), (2) and (3)	
(i) Number of properties in Local Authority's District	250	44,711	7,169	52,130	7
(ii) Number of properties inspected as a result of—					
(a) Notification	102	772	182	1,056	—
(b) Survey under the Act	—	—	—	—	7
(c) Otherwise	—	—	—	—	—
(iii) Total inspections carried out— including re-inspec- tions	180	878	258	1,316	7
(iv) Number of proper- ties inspected (in Sect. ii) which were found to be infested by—					
(a) Rats { Major	—	—	—	—	—
Minor	50	418	77	545	2
(b) Mice { Major	—	—	—	—	—
Minor	42	263	95	400	—
(v) Number of infested properties (in Sect. iv) treated by the Local Authority	92	658	172	922	1
(vi) Total treatments carried out— including re-treatments	156	752	246	1,154	2

17. Nuisances from Pigeons.

The practice of trapping pigeons in the town centre was continued during the early part of the year ; thirteen ringed and thirty-four unringed birds were trapped.

The practice had commenced in December, 1955 and at the end of 1958 the number of birds which had been trapped and disposed of amounted to 214 ringed and 326 unringed, making a total of 540.

SECTION V.

HOUSING.

1. Slum Clearance.

The Council's approved slum clearance programme provided for the clearance of 2,250 houses in areas and 250 individual houses during the five years commencing the 1st January, 1955.

Satisfactory progress had been made during the first three years and in 1958 a further 6 clearance areas, which involved 451 houses, and a further 71 individual houses were represented.

The following data summarise the progress made under the relevant parts of the Housing Act, 1957 :—

(A) Clearance Schemes.

(i) Schemes initiated 1954—1957.

The following table gives details of the schemes and the progress made :—

Clearance Scheme	No. of occupied houses	Estimated number of persons to be displaced	Activity during the year 1958		Progress since initiation of scheme	
			No. of houses demolished	No. of persons displaced	No. of houses demolished	No. of persons displaced
Charles Street	111	349	—	7	98	322
Herbert Street	24	100	2	—	25	70
Grove Street (Heath Town)	71	220	—	—	71	217
Wolverhampton Road (Heath Town)	18	65	—	—	16	62
St. Matthew Street	142	427	4	30	124	417
Montrose Street	98	329	3	20	74	293
Vauxhalls	119	346	95	38	122	374
Bagnall Street	223	722	23	5	214	725
Wright Street	107	351	35	11	103	361
Pond Lane	44	139	44	9	44	147
Pearson Street	140	453	95	117	102	465
Moseley Street	8	29	4	2	9	30
Graiseley Row	108	346	14	167	17	354
Lower Stafford Street	125	381	51	174	51	370
All Saints Road	112	280	—	225	—	250
St. John's Square	94	463	—	357	—	384
Tower Street	20	66	—	45	—	60
Oxley Street	90	295	5	104	5	104
Church Street (Heath Town)	58	195	—	94	—	107

(ii) Schemes initiated during 1958.

(a) Cobden Lane Clearance Scheme.

This scheme, comprising 268 houses in 4 Clearance Areas, was represented on the 3rd January. Two Compulsory Purchase Orders, involving the 4 Clearance Areas, were made by the Council on the 5th May.

Forty-four objections were received in respect of the two Orders. The Local Public Inquiry was held on the 28th to 30th October and confirmation is awaited.

(b) Franchise Street Clearance Scheme.

This scheme, which comprised 2 Clearance Areas affecting 183 houses, was represented on the 1st August. The Council subsequently made a Compulsory Purchase Order in respect of both Clearance Areas on the 24th November. The Local Public Inquiry had not been held by the 31st December.

(iii) Future Programme.

The following provisional programme of the areas to be represented during 1959 was formulated :—

Steelhouse Lane Area	...	...	210 houses
Heath Street (Heath Town) Area	...		115 „
Coventry Street Area	...	...	25 „
Inkerman Street (Heath Town) Area			275 „
Peel Street Area	...	...	70 „
Total			695 „

The preliminary inspections of the properties in the Steelhouse Lane Area had been completed by the end of the year, and inspections of the houses in the Heath Street (Heath Town) Area were in progress.

(B) Individual Unfit Houses.

Seventy-one houses were represented for action under Part II of the Housing Act, 1957. In addition, 31 unfit houses owned by the Council and 13 Crown properties were dealt with ; in these

instances, the Medical Officer of Health issued certificates of unfitness to satisfy the provisions of the Housing (Financial Provisions) Act, 1958.

2. Common Lodging Houses.

The one remaining common lodging house was demolished.

3. Overcrowding.

Fifteen premises were inspected and measured following complaints.

4. Moveable Dwellings.

Fourteen visits were made to accommodation of this nature.

Three applications to station caravans on various sites were received and granted.

5. Improvement Grants.

The administrative work in connection with applications for improvement grants is carried out by the Borough Engineer, but this department is always consulted regarding the suitability of the property ; 157 such enquiries were received and dealt with.

The Housing Committee approved 105 applications, and 104 grants were paid following completion of the works.

6. Rent Act, 1957.

The following is a summary of the action taken with regard to applications received for the issue of Certificates of Disrepair and their cancellation during the period 1st January to 31st December :—

Part I—Applications for Certificates of Disrepair.

Number of applications for certificates	...	185
Number of decisions not to issue certificates	...	18
Number of decisions to issue certificates—		
(i) in respect of some but not all defects	...	190
(ii) in respect of all defects	... ...	18

Number of undertakings given by landlord under paragraph 5 of the First Schedule	109
Number of undertakings refused by Local Authority under proviso to paragraph 5 of the First Schedule	1
Number of Certificates issued	123

Part II—Applications for Cancellation of Certificates.

Applications by landlords to Local Authority for cancellation of certificates	25
Objections by tenants to cancellation of certificates	3
Decisions by Local Authority to cancel in spite of tenants' objections	2
Certificates cancelled by Local Authority ...	19

SECTION VI.

INSPECTION AND SUPERVISION OF FOOD.

1. Meat Inspection.

(a) Public Abattoir.

The following table gives details of the numbers of animals slaughtered during the years 1958, 1957 and 1956 :—

	1958	1957	1956
Cattle (other than cows)	15,733	17,034	13,692
Cows	5,324	3,704	3,204
Calves	3,198	4,866	6,012
Sheep	79,428	81,359	73,760
Pigs	59,343	54,053	51,114
Totals ...	163,026	161,016	147,782

The total kill for 1958, compared with that for 1957, showed an increase of 1.2% and exceeded any previous figure.

The staff comprised three full-time meat inspectors and one part-time clerk.

Carcases and Offal inspected and condemned in whole or in part.

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Number killed	15,733	5,324	3,198	79,428	59,343	—
Number inspected	15,733	5,324	3,198	79,428	59,343	—
All diseases except tuber- culosis and cysticerci:— Whole carcasses con- demned	5	7	26	81	52	—
Carcases of which some part or organ was condemned	1,716	1,706	9	1,550	1,461	—
Percentage of the number inspected affected with disease other than tuber- culosis and cysti- cerci	10.94	32.17	1.09	2.05	2.55	—
Tuberculosis :— Whole carcasses con- demned	10	22	—	—	16	—
Carcases of which some part or organ was condemned	554	667	—	—	1,081	—
Percentage of the number inspected affected with tuber- culosis	3.58	12.94	—	—	1.85	—
Cysticercosis :— Carcases of which some part or organ was condemned	62	17	—	—	—	—
Carcases submitted to treatment by refri- geration	62	17	—	—	—	—
Generalised and totally condemned	—	—	—	—	—	—

Meat and offal condemned. The total weight of meat and offal condemned from all sources amounted to :—

Meat	...	...	29 tons	10 cwts.	2 qrs.	5 lbs.
Offal	...	...	58 tons	18 cwts.	2 qrs.	21 lbs.
Total	...		88 tons	9 cwts.	0 qrs.	26 lbs.

It was estimated that 1/400th of the total throughput of fresh carcase meat was condemned; in 1957 the corresponding estimated fraction was 1/300th.

Analysis of Weight of Meat and Offal Condemned.

	Tuberculosis		Other Diseases		Totals			
	Meat lbs.	Offal lbs.	Meat lbs.	Offal lbs.	tons	cwts.	qrs.	lbs.
Abattoir								
Cattle	7,375	18,512	3,694	32,117	27	10	3	14
Sheep	19,525	26,388	5,795	37,812	39	19	1	4
Pigs	—	—	1,116	454	—	14	0	2
Poultry	—	—	3,880	4,691	3	16	2	3
	16,185	2,212	7,340	9,357	15	13	1	10
Stores								
Cattle	—	—	40	411	—	4	0	3
Sheep	—	—	60	20	—	—	2	24
Pigs	—	—	—	6	—	—	—	6
Poultry	—	—	11	—	—	—	—	11
Other Sources								
Cattle	—	—	1,108	13	—	10	0	1
Sheep	—	—	12	10	—	—	—	22
Pigs	—	—	—	10	—	—	—	10
Totals	43,085	47,112	23,056	84,901	88	9	0	26

Tuberculosis Orders 1938—1945. One cow was received for slaughter and the complete carcase and all the organs were condemned.

Improvements. New strip lighting was installed in all slaughter halls and hanging rooms; electric fans were provided in offal and pig carcase hanging rooms.

A general improvement in the standard of slaughterhouse hygiene was effected.

(b) Private Slaughterhouse.

At the only private slaughterhouse, 12,384 pigs were slaughtered and 591 (4.77%) showed evidence of disease ; 390 (3.15%) were found to be affected with tuberculosis, while 201 (1.62%) were affected with other diseases.

The total amount of meat and offal condemned was 2 tons 19 cwts. 3 qrs. 6 lbs., consisting of 2 tons 3 cwts. 0 qrs. 3 lbs. of meat and offal from animals affected with tuberculosis and 16 cwts. 3 qrs. 3 lbs. from animals affected with other diseases.

(c) Frozen Meat Wholesale Depots.

Supervision of the four frozen meat wholesale depots was again maintained. The two depots located outside the boundaries of the Public Abattoir still receive quantities of fresh home killed meat.

Total weights of 10 cwts. of frozen carcass meat and 1 qr. 5 lbs. of frozen offal were condemned.

2. Slaughter of Animals Acts, 1933—1958.

Sixty-three licences were renewed and eight new licences issued, making a total of 71 persons on the register.

In addition five slaughtermen, issued with licences by other local authorities, were employed.

3. Food Premises.

The following table gives details of the number of food premises, by type of business :—

Grocery and Provision	...	...	...	390
Licensed	...	...	...	332
Butchery	...	...	...	179
Fruit and Greengrocery	...	...	...	151
General	...	...	...	114
Catering	...	...	...	105
Confectionery	...	...	...	99
Fish Frying	...	...	...	58
Food Manufacturing	...	...	...	50
Wet Fish	...	...	...	32
Food Storing	...	...	...	23
Baking	...	...	...	16
Food Packing	...	...	...	7
Miscellaneous	...	...	...	159
Total	...	...	...	1,715

4. Inspection of Food Premises.

Three thousand, seven hundred and eighteen visits were paid to food premises for the purpose of inspection.

The total weight of foodstuffs found to be unfit for human consumption was 11 tons 19 cwts. 0 qrs. 12 lbs.

5. Disposal of Condemned Food.

Carcase meat and offal are processed at the Public Abattoir, and the residual fertilisers are sold to a firm of horticulturists. Tinned goods are disposed of by incineration at the Cleansing Department's depot.

6. Milk Supply.

Regular inspection of dairies was carried out together with close supervision of milk processing by pasteurisation and sterilisation.

Ninety-nine and 453 visits were made to dairies and milk shops respectively.

REGISTRATIONS.

Number of Persons and Firms on register	...	458
Dairies	... ..	8
Bottled Milk Shops	... ..	446
Dairies outside the borough retailing milk within		4
Retail Purveyors	... ..	29
Dealers, Sterilisers and Pasteurisers	...	3

The following table shows details of the 241 samples taken and the tests applied :—

Class of Milk	Number taken	Appropriate Tests	Passed	Failed
Tuberculin Tested (Farm Bottled)	24	Methylene Blue	21	3
Tuberculin Tested (Pasteurised)	72	Phosphatase	72	—
Pasteurised	73	Methylene Blue	72	—
		Phosphatase	73	—
		Methylene Blue	72*	—
Sterilised	72	Turbidity	72	—

*One sample for Methylene Blue test void owing to high atmospheric shade temperature.

The results were considered to be very satisfactory and indicated that the milk supply maintained a high standard.

7. Ice Cream.

Vendors' Premises. Twenty-two applications for the registration of premises for the sale of pre-packed ice-cream were received and approved, and 15 premises were removed from the register, making a total of 513 premises registered.

Manufacturers' Premises. One manufacturer's premises was removed from the register, leaving a total of 9 premises registered.

The following table gives details of the action taken :—

Inspections of :—

Vendors' Premises	...	...	...	188
Manufacturers' Premises	...	...	...	64
Informal notices served	...	...	...	5
Informal notices complied with	...	...	...	1
Total improvements recorded	...	...	...	4

Sampling.

(a) **Methylene Blue Test.** Sixty-seven samples of ice cream were examined and placed in the Ministry's Provisional Grades. Two (3%) failed to pass the prescribed test compared with 8 (10.5%) for the previous year ; special investigations of the plants concerned were not considered necessary. Repeat samples were taken and found to be satisfactory.

The following tables show a summary of the results obtained and also give a comparison with 1957 :—

Manufactured within the borough.

Year	Total No. of Samples Taken	PROVISIONAL GRADE			
		1	2	3	4
1958	27	24 88.9%	1 3.7%	1 3.7%	1 3.7%
1957	38	30 79%	— —	2 5.3%	6 15.7%

Manufactured outside the borough.

Year	Total No. of Samples Taken	PROVISIONAL GRADE			
		1	2	3	4
1958	40	40 100%	— —	— —	— —
1957	38	37 97.4%	1 2.6%	—	—

Combined summary.

Year	Total No. of Samples Taken	PROVISIONAL GRADE			
		1	2	3	4
1958	67	64 95.5%	1 1.5%	1 1.5%	1 1.5%
1957	76	67 88.2%	1 1.3%	2 2.6%	6 7.9%

The following table shows the number of samples examined yearly from 1947 to 1958 inclusive, together with the number and percentage reported upon adversely :—

Year	No. of Samples	Unsatisfactory	
		No.	%
1947	69	48	70
1948	108	68	63
1949	99	31	31
1950	163	37	23
1951	117	12	10
1952	141	19	13
1953	140	1	.7
1954	106	7	6.6
1955	50	2	4.0
1956	67	4	6.0
1957	76	8	10.5
1958	67	2	3.0

(b) Chemical Analysis. Twenty-four samples of ice cream, including choc-bars, were submitted for chemical analysis compared with 33 for the previous year. All samples were reported to be genuine ; the average fat content (excluding choc-bars) was 9.13% as against the previous year's figure of 9.89%.

Ice Lollies. In addition to the nine premises registered for the manufacture of ice cream, one establishment remains registered for the manufacture of ice lollies only compared with 3 in 1957, two premises having closed during the year. Thirty-nine samples of varying flavours and compositions were submitted for bacteriological examination compared with 14 for the previous year ; three samples were found to be unsatisfactory. Following investigation and advice, special and repeat samples were taken and reported to be satisfactory.

8. Dairy Festival Exhibition.

In June a dairy festival exhibition, sponsored by the Milk Publicity Council and the National Dairymen's Association, was held in the Wulfrun Hall, and the department was asked to provide exhibits for a stall.

The department willingly co-operated, and the exhibits displayed illustrated the part played by the local authority in ensuring that the methods of production, collection, processing and distribution result in milk of high quality.

9. Sampling.

Two hundred and fifty-nine samples of food and drugs, consisting of 85 formal and 174 informal, were taken for analysis by the Public Analyst. Fifteen samples (5.8%), seven of which were formal, were found to be non-genuine or otherwise unsatisfactory.

Imported articles of food bearing labels which did not give the ingredients of the articles were the principal cause of complaint.

Nine samples of milk were found to be either slightly deficient in fat or to contain small amounts of extraneous water. The farms from which the milk was derived were visited and "appeal to cow" samples taken. The reports indicated that the fat deficiencies were natural to the particular milk supply and that the extraneous water was due to carelessness in cooling the milk. A letter of warning was sent to the producer in each case of extraneous water.

FOODS AND DRUGS ACT, 1955.

Summary of Samples taken.

Article	Number examined			Number adulterated		
	Formal	Informal	Total	Formal	Informal	Total
Butter		8	8			
Cereals		3	3			
Cheese		4	4			
Cheese Spread		2	2			
Coffee		1	1			
Coffee & Chicory		3	3			
Colouring Matter		1	1			
Cream	3	13	16			
Dried Fruit		6	6			
Fish Cakes		1	1			
Fish & Fish Paste		6	6			
French Mustard		1	1		1	1
Fruit Juices		6	6			
Glacé Cherries		7	7			
Ground Almonds		7	7		1	1
Halibut Liver Oil	1	1	2			
Herbs		2	2			
Ice Cream		2	2			
Jam		11	11			
Jelly		2	2			
Lard		2	2			
Lemon Cheese		2	2		1	1
Lemon Peel		6	6			
Malt Vinegar		2	2			
Margarine		6	6			
Marmalade		2	2			
Marzipan		6	6			
Meat & Meat Paste		9	9			
Milk	70	10	80	5	4	9
Milk "Appeal to Cow"	4		4			
Milk F.C.U.		2	2			
Miscellaneous Drugs		5	5			
Miscellaneous Foods		20	20			
Pickles	2	3	5	2	1	3
Sausage		3	3			
Self Raising Flour		1	1			
Soup		4	4			
Spices		3	3			
Whisky	5		5			
Yoghourt		1	1			
Totals	85	174	259	7	8	15

FOOD AND DRUGS ACT, 1955.

Administrative Action Taken Regarding Samples Reported not to be Genuine.

No. of Sample	Article of Food	Formal or Informal	Nature of Adulteration or Irregularity	Action Taken
48	Chilli Pickle	Informal	Ingredients not stated on label	See samples 72 & 73.
53	Milk	Formal	Extraneous water 2.3%	Letter of warning sent to producer.
72	Capsicum Pickle	Formal	Ingredients not stated on label	Letters of warning sent
73	Karela Pickle	Formal	Ingredients not stated on label	
174	Halibut Liver Oil	Informal	Deficient of vitamin "A"	Formal sample found genuine.
176	Milk	Informal	Deficient of fat 1.5%	See samples 186, 189, 190.
182	Milk	Informal	Extraneous water 1.3%	
183	Milk	Informal	Deficient of fat 3.0%	Letter of warning sent to producer.
186	Milk	Formal	Extraneous water 1.1%	
189	Milk	Formal	Contained a trace of extraneous water	See sample 232.
190	Milk	Formal	Contained a trace of extraneous water	
231	Milk	Informal	Extraneous water 3.8%	Letter of warning sent to producer.
232	Milk	Formal	Extraneous water 2.3%	
237	French Mustard	Informal	Ingredients not stated on label	Formal samples to be taken.
252	Lemon Peel	Informal	Contained copper .23 parts per million	

10. (a) Dried Hen Egg Albumen.

Four thousand and twelve pounds of dried hen egg albumen known to be infected with salmonella organisms were reconstituted and subjected to an approved process of heat treatment. Forty samples of the treated product were taken for bacteriological examination ; no organisms of the salmonella or shigella groups were isolated in any of the samples.

(b) Danish Pasteurised Hen Egg Albumen.

One hundred and twelve samples were taken for bacteriological examination ; no organisms of the salmonella or shigella groups were isolated.

(c) Dutch Pasteurised Hen Egg Albumen.

One sample was submitted for bacteriological examination ; no organisms of the salmonella or shigella groups were isolated.

11. Contaminated Apples.

Information was received from the Chief Food Inspector, City of Birmingham, that an analysis of Italian apples had been carried out at Hull and had revealed the presence of 8 parts per million of arsenic. A consignment of these apples had been despatched to the Southfield Market, Birmingham where two Wolverhampton traders had purchased a total of 30 cases.

Investigations revealed that 25 of these cases were still in the possession of the traders ; these apples were withdrawn from sale and 6 samples were forwarded to the Public Analyst for examination. The results showed that arsenic and lead were present in amounts varying from 0.09 to 0.4 and from 0.7 to 2.8 parts per million respectively ; these were considered satisfactory and the apples were released for sale.

12. Catering Establishments.

Routine visits totalling 312 were paid to hotels, restaurants, snack bars and school kitchens. Sixteen informal notices were served, 26 were complied with and 58 improvements recorded.

13. Provision Shops, Warehouses and other Shop Premises.

Nine hundred and seventy-eight inspections of provision shops and warehouses, and 387 inspections of other shop premises were made. Eighty-seven informal notices were served, 53 were complied with and 129 improvements recorded.

14. Wet and Fried Fish Shops.

Ninety-two inspections were made of these premises. Eight informal notices were served, 8 were complied with and 26 improvements recorded.

15. Shell Fish.

Four samples of mussels were taken and submitted for bacteriological examination ; the reports received were satisfactory.

16. Mobile Fish and Chip Shop.

One mobile shop continued to operate.

17. Registration of Butchers' Shops and Premises where Preserved Food, etc. is Prepared or Manufactured.

The number of persons and premises registered in accordance with Section 67 of the Wolverhampton Corporation Act, 1936 increased by 3 from the previous year and totalled 179. Routine inspections numbered 370 ; 14 informal notices were served and 18 were complied with, resulting in 46 improvements.

One application was received in accordance with Section 16 of the Food and Drugs Act, 1955, for the registration of premises where preserved food, etc., is prepared or manufactured ; the application was in order and the premises registered. Forty-eight inspections were made of the 59 premises on the register ; 5 informal notices were served, 5 were complied with and 29 improvements recorded.

18. Licensed Premises.

A total of 275 visits was made to these premises ; 49 informal notices were served, 28 were complied with and 46 improvements recorded.

19. Bakehouses.

Twenty-eight routine inspections were made ; one informal notice was served, one was complied with and 11 improvements recorded.

20. Retail Markets.

Routine inspections were made of all food stalls in both the open and covered markets. The conditions under which food was sold continued to be far from ideal, but new markets are in course of construction and it is anticipated that they will be ready for occupation in the spring of 1960.

21. The Food and Drugs Act, 1955.

The following table summarises the action taken regarding contraventions of this Act :—

Article of Food	Nature of Offence	Action Taken
Doughnut	Presence of glass	Legal proceedings instituted ; defendants fined £7 with £3. 3s. 0d. costs.
Fowl	Unfit for human consumption—leucosis	Legal proceedings instituted ; defendant fined £12 with £3. 3s. 0d. special costs.
Tin of peaches	Presence of walnuts, fish and paper	Letter sent to South African firm of canners.
Pork pie	Presence of mould	Legal proceedings instituted ; defendants fined £20 with £4. 4s. 0d. special costs.
White & brown bread	Presence of extraneous matter	Warning letter sent to firm of retailer/bakers.
Loaf of bread	Presence of string	Warning letter sent to firm of retailer/bakers.
Half loaf of bread	Presence of mould	Warning letter sent to firm of wholesaler/bakers.
Tin of baked beans with pork sausage	Presence of open weave cotton fabric	Warning letter sent to firm of wholesalers.
Malt loaf	Presence of mould	Warning letter sent to firm of retailer/bakers.
Roast pork	Presence of maggots	Legal proceedings instituted ; firm of retailers acquitted—manager of shop fined £25.
Stuffing	Presence of dead fly	Warning letter sent to proprietors of restaurant.
Sausage roll	Presence of mould	Warning letter sent to firm of retailer/bakers.
Malt loaf	Presence of rabbit dropping	Warning letter sent to firm of retailer/bakers.
Joint of pork	Affected with bone taint	Warning letter sent to firm of wholesaler/retailers.

22. The Food Hygiene Regulations, 1955.

(a) Further progress was made with the enforcement of these Regulations ; 345 contraventions of Parts II and IV were remedied.

(b) Legal proceedings were instituted against a butcher for using tobacco while he was handling food ; he was given an absolute discharge on payment of four shillings costs. In five other similar contraventions warning letters were sent to the offenders.

(c) Two vehicles used for transporting meat were found to contravene Regulation 29 ; warning letters were sent to the owners concerned.

